THE Soybean Digest

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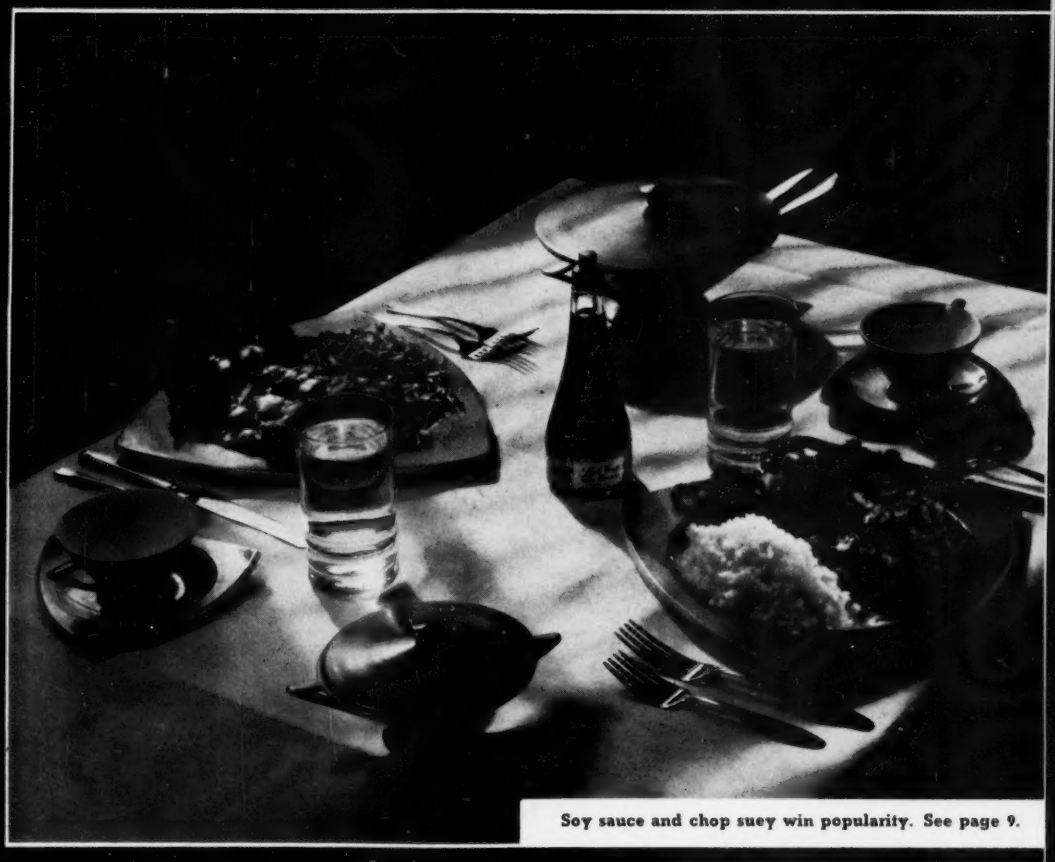
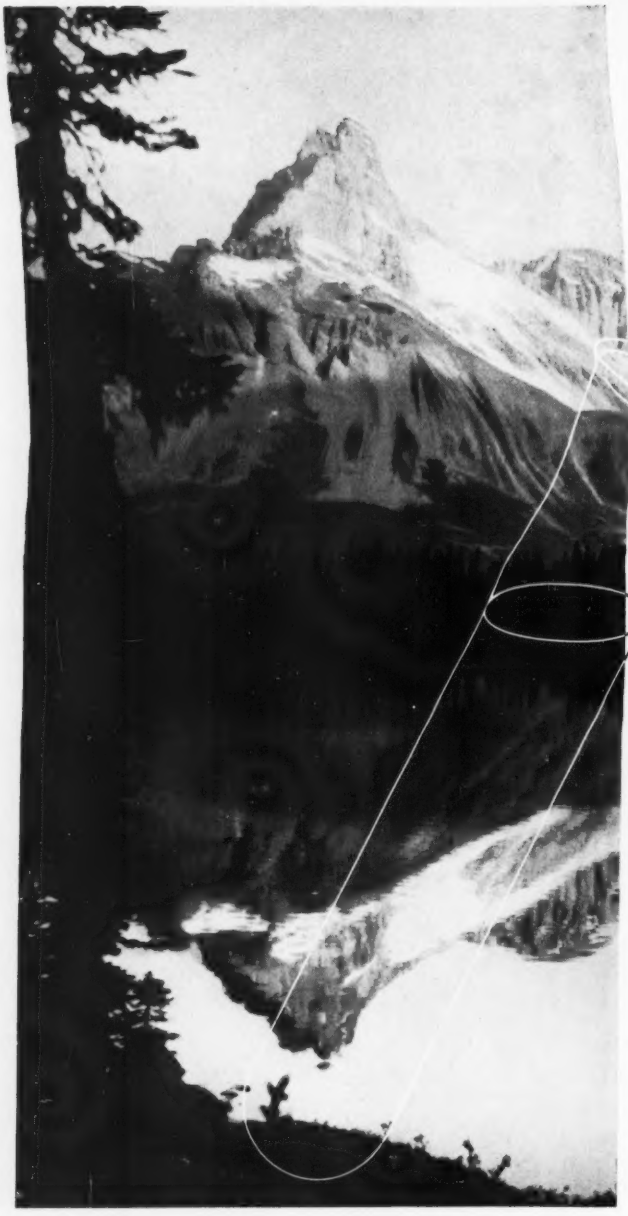


Soy sauce and chop suey win popularity. See page 9.

JUNE ✦ 1953

VOLUME 13 ✦ NUMBER 8



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THE Soybean Digest

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HUDSON, IOWA

Vol. 13 • June 1953 • No. 8

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THE SOYBEAN DIGEST

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THE AMERICAN SOYBEAN ASSOCIATION

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Objectives of the American Soybean Association include the bringing together of all persons interested in the production, distribution and utilization of soybeans; the collection and dissemination of the best available information relating to both the practical and scientific phases of the problems of increased yields coupled with lessened costs; the safeguarding of production against diseases and insect pests; the promotion of the development of new varieties; the encouragement of the interest of federal and state governments and experiment stations; and the rendering of all possible services to the industry.

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BROKERS TO THE SOYBEAN PROCESSOR

EDITOR'S DESK

TIME TO FACE FACTS This may well be the first year since soybeans became a major crop in the United States when we have a carry-over at the end of a crop season. Present rates of processing and export, compared with the quantity of soybeans on hand on farms and local elevators, together with those in terminal elevators and processing plants, will leave us with a balance on Oct. 1 if there are no market changes of consequence.

If that is the case the usual price flurry on September beans will not assert itself this year. Likewise, a carry-over always tends to force new crop prices downward in other crops, and there is no reason to believe a carry-over will not do the same thing this year.

The general trend of agricultural prices is downward. Soybeans may follow. If only the domestic demand is considered there can be no question, assuming we have normal growing and harvesting weather. The extent of export demand is the unknown factor. Recent price declines should create more interest among buyers for export. Competition with soybeans and oilseeds from other parts of the world will determine the extent of purchases made here.

This is a time for caution. Two of our competitive oilseeds are in price support trouble now. Neither flaxseed nor cottonseed, both relying on price supports to maintain prices, are in healthy circumstances. With CCC taking possession of soybeans under loan now, we must give serious consideration to the possibilities of our being in the same situation when the 1953 crop movement begins. Are we going to follow in the footsteps of cottonseed and flax?

All the sales ability, research facilities and personnel, promotional knowledge and handling know-how which we have must be applied to the soybean industry in coming months. For the first time since 1941 we will have a chance to determine how sound and sure-footed the leadership of the soybean industry actually is. We will get experience which will not come easy.

Is this not the time to again suggest that which has been suggested on this editorial page many times before —an industry-wide organization, intelligently organized, soundly financed, directed with foresight and the confidence which comes from experience? To do for the soybean industry what similar organizations have done in other commodities? We have made much progress in the past decade. Has it come because of us? Or in spite of us? Are we now about ready for that which was not recognized when the industry had smooth sailing? Or must we really have our backs to the wall before it can come?

RESPONSE TO LATE NEWS GRATIFYING Reception of "Late News," carried in the monthly issues of this publication, and 20 additional times per year for those who want to keep in constant touch with the markets and the factors which affect them, has been far above expectations. There has been demand for such a publication from various quarters for some time. We recognized that demand, and the board of directors of ASA at the December meeting decided to proceed with the publication.

At the same time we knew that there are news letters by the dozens, each trying to give the reader "confidential" information on an "exclusive" basis. Most of them sell for far more than "Late News." Frankly, we expected that the building of sizable circulation on "Late News" would be a task requiring considerable time and effort.

We have been pleasantly surprised. Apparently the need was even greater than we recognized. The demand was stronger than we figured. Enough people have now paid their $7.50 per year to assure continued publication over a period of time, assuming that we can continue to give the type of last-minute information desired by our readers.

Incidentally, what are your reactions to "Late News"? What would you like to see included? What have we missed? How can we improve it? We would like to hear from you about it.

SOYBEANS ARE NOT REPRESENTED There is growing recognition of the importance of world trade to continued agricultural prosperity and soundness in America. We have one of the few great surplus production areas where foods is concerned. Much of the world, both European and Asiatic, can never hope to produce sufficient foods and fibers for their own use.

Secretary Benson has a new advisory committee on foreign agricultural trade. The first meeting was held in Mid-April. Although soybeans are one of the list of commodities exported in quantity, we found no persons representing the soybean industry in the committee membership list. If membership on the committee is to be on a commodity basis, as appears from the initial announcement, then certainly soybeans are worthy of consideration. Exports are not large, in the sense of tonnages of wheat or cotton, but when as much as one-third of our entire soybean crop is exported in the form of beans or oil the export market cannot be ignored.

The objective of this advisory committee is laudable. There is great room for improvement in our trade with other countries. Involved are tariff policies, standards, dollar exchange, our willingness to take other commodities in return. We will watch the work of this committee with much interest—and hope for membership familiar with soybean export problems.

ONE BIG ANNUAL OCCASION At a time when we will be first facing the realities of the delayed postwar adjustments the 33rd annual convention at St. Louis Aug. 20 and 21 should be invaluable to the grower, handler and processor of soybeans. The program will be streamlined. The highlights will be featured. Attendance will come from throughout the soybean production areas of the nation. It will be the one meeting of the year when you can really learn what is going on in other areas of soybeanland.

Mark the dates now. Make plans to attend. The Jefferson Hotel is air-conditioned, hence the possibilities of August heat will not be a factor. Reservation information will be sent to all members about July 1.

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ACTIVITIES OF YOUR ASSOCIATION

MELLORINE. Illinois House Bill 578 to set up standards for vegetable oil frozen desserts was voted out of the House committee on agriculture after hearings the week of May 11.

Bill is backed by dairy interests in the state, is opposed by American Soybean Association and other oilseed groups. ASA Secretary Geo. M. Strayer and Illinois Directors Albert Dimond and C. G. Simcox appeared at the hearings in opposition.

There are several objections to the bill as it now stands:

1—Complete authority for setting up the standards is vested in the state director of agriculture, which gives one man arbitrary authority.

2—The name "Mellorine" is not permitted, as it is in standards being set up in other states.

3—A two-quart size limit has been placed on containers.

4—Such severe restraints are placed on advertising as to make it very difficult to advertise the product.

5—There is no stipulation as to minimum fat content. We should be assured of a quality product.

Manufacturers of frozen desserts would prefer to have at least another year's experience in manufacturing and merchandising the product before standards are set up.

The Illinois bill has not yet been placed on the calendar of a Senate committee.

A bill which would have prohibited frozen desserts in California was killed by the Assembly after it was passed by the Senate. The Missouri legislature adjourned June 1 without bringing House Bill 274 to outlaw frozen desserts to a vote in the Senate. It was passed by the House.

A bill to set up Mellorine standards in Alabama, sponsored by the National Cotton Council, was reported favorably by both Senate and House committees May 20. Early floor action was expected.

BUTTER. ASA Secretary Geo. M. Strayer has written to U. S. Secretary of Agriculture Ezra Taft Benson expressing his concern lest the surplus butter now held by the U. S. Department of Agriculture be disposed of in such a way as to be detrimental to margarine.

Strayer pointed out that the 50 million pounds of CCC butter earmarked for the school lunch program and an equal amount for the Armed Forces at greatly reduced prices to a large extent displaces margarine and so is highly detrimental to the soybean industry.

Strayer made it plain that he was not protesting the butter support program, but only asked that it not become "a new program which discriminates against margarine."

In reply the dairy branch of the Production and Marketing Administration stated that USDA had had "no alternative but to utilize the other limited outlets" for surplus butter.

The dairy branch pointed out Benson's concern over the accumulation of dairy products under the support program, and that he is working with the dairy industry in seeking "more satisfactory solutions."

MARGARINE. A bill to permit the serving of margarine by the U. S. Navy has been introduced by Congressman William H. Bates.

The Navy and Marine Corps are prohibited from purchasing and serving margarine by the Navy ration law which was adopted before the development of margarine itself nearly 84 years ago.

The Navy has asked for permission to buy and use margarine at its discretion, as is permitted to the Army and Air Force.

Advocates of the measure point out that use of margarine by the navy could save taxpayers millions of dollars yearly, and would accord equal treatment to American products such as cottonseed and soybean oils now denied by law.

The Army and Air Force bought over 34 million pounds of margarine in 1952.

ICC HEARING. ASA Director Ed Tillman, Caruthersville, Mo., appeared before hearing of the Interstate Commerce Commission May 20 favoring request of Continental Barge Line for a permit to serve as a common carrier on the lower Mississippi.

If granted, this will increase transportation facilities on soybeans and other grains in the Midsouth.

—sbd—

MISSISSIPPI VARIETIES

Twelve varieties of soybeans were tested at the Brown Loam Branch Station of Mississippi to determine the best producers for the brown loam area of that state, reports John B. Gill, the station superintendent.

From three years' results the recommended varieties for bean production are Ogden, Roanoke and Volstate.

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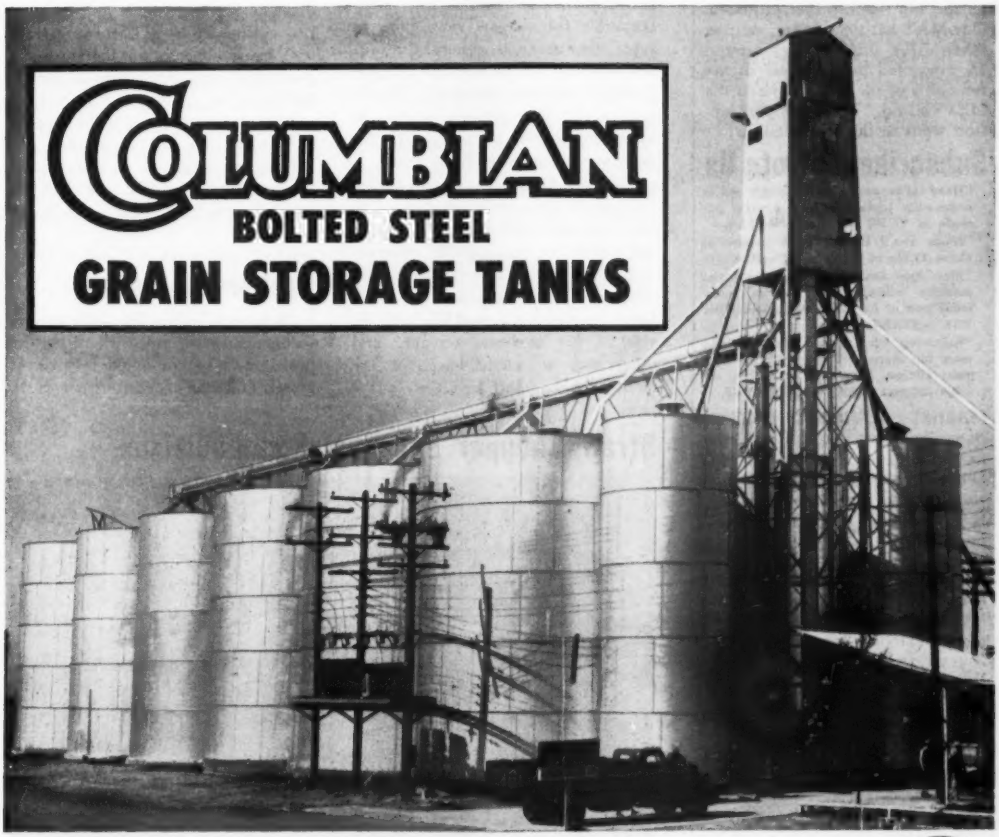

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GROWERS

Narrow Row Advantage

Soybeans in 18- or 20-inch rows may be expected to yield on the average about five bushels per acre more than in 40- or 42-inch rows in southern Minnesota, reports J. W. Lambert, associate professor of agronomy and plant genetics at the University of Minnesota.

Lambert bases his conclusions on experiments with a number of row widths in 1950, 1951 and 1952. The Ottawa Mandarin and Blackhawk varieties were used.

Lambert points out that conditions in southern Minnesota are more favorable for narrow rows than in some other areas. In general the soils are relatively fertile and the adapted varieties are short. In central Minnesota where the growing season is somewhat shorter the advantage for narrow rows may not be so great.

Special planting and cultivating equipment for narrow row spacings has been developed recently by some machinery companies. Whether it would pay the soybean farmer to buy such equipment depends on such factors as the fertility of his soil, the size of his soybean acreage, and other uses he would have for the equipment, Lambert says.

If you use narrower rows, should you increase seeding rate per acre accordingly? Lambert says yes, in order to get a good stand. Sow about 60 pounds per acre in 40- to 42-inch rows, and 90 pounds per acre in 18- or 20-inch rows.

Use of Irrigation

Soybeans respond less than other crops to irrigation in dry seasons in Mississippi, according to preliminary tests at Delta Branch Experiment Station, Stoneville, and State College Station. But yields were increased 9.6 bushels per acre through irrigation in a test on buckshot clay soil, according to Mississippi Farm Research.

In general beans suffer from drought only in August and September during fruiting. Early irrigation of beans appears unlikely to be profitable, and late summer irrigation must be applied at low cost, as a 10-bushel increase of yield appears to be more than can be expected.

Cost of irrigation in the experiments varied from $12 to $32.15 for six and three-quarters to eight inches of water.

Preharvest Sprays

Preharvest sprays for soybeans are recommended in areas where mature beans can't be combined because of growing weeds, according to J. L.

Straw Chopper Successful in Louisiana

—Digest Photo by Pellett

STRAW CHOPPER in action on a soybean combine. Two of these, operating on the hammermill principle, were tried out on the Scott Plantations at Tallulah, La., last year. Though they are still in the experimental stage they did a very satisfactory job of chopping up and spreading the straw. The Scotts hope to equip all their combines with them this coming year. (For further description of a straw chopper see page 30.)

Cartter, director of the U. S. Regional Soybean Laboratory at Urbana. He reported on results of a two-year study on this practice.

He said that preharvest sprays, properly applied, would dry up the weeds so that the soybeans could be combined normally. The sprays haven't shown any consistent advantage, however, on weed-free beans. If they are applied early enough to speed up maturity of the beans, they reduce the yield.

Using preharvest sprays to hasten maturity by more than four or five days will also reduce the oil content and quality of soybeans.

Hawkeye Leads in Iowa

Hawkeye was the most popular variety of soybeans with Iowa farmers in 1952 and was used in planting nearly half of the total soybean acreage in the state. This conclusion is based on reports from about 900 farmers made to the Iowa Crop and Livestock Reporting Service.

Other leading varieties were the Lincoln, accounting for over one-sixth of the acreage, and Adams with over one-eighth. Following in importance are the Blackhawk, with 8 percent of the planted acreage, and Bavender, Manchu, Richland, Early Korean, Earlyana, and several other varieties.

The most popular variety planted in the northern two-thirds of the state was Hawkeye, while Lincoln and Adams predominated in the southern third. The Blackhawk variety was second to Hawkeye in popularity in the northern one-third of the state.

Missouri Yield Contest

This year for the first time 4-H and Future Farmers Association students in Missouri will have an opportunity to take part in a soybean production contest. It is sponsored by the Missouri Cotton Producers Association.

The club was officially organized in April.

Any 4-H or FFA student who produces a soybean crop is eligible. First prize will be a $100 U. S. savings bond. Second through seventh place winners will each receive $50 savings bonds.

PERCENTAGE DISTRIBUTION OF PLANTED SOYBEAN ACREAGE BY VARIETIES ON IOWA FARMS-1952

Crop Reporting District	Hawkeye	Lincoln	Adams	Blackhawk	Bavender	Manchu	Richland	Early Korean	Earlyana	Other Varieties(1)
					PERCENT					
N. West	55.0	2.1	1.1	21.0	1.3	6.2	4.7	4.3	2.0	2.3
N. Central	54.6	.9	—	15.3	4.6	10.1	3.0	.5	2.8	8.2
N. East	58.9	6.4	3.9	12.0	2.6	6.7	1.3	1.3	4.9	2.0
W. Central	54.6	25.1	12.7	1.1	4.1	—	1.9	.5	—	—
Central	46.0	22.9	20.9	.9	5.0	—	2.7	1.0	.1	.5
E. Central	56.9	23.1	9.0	4.0	2.5	—	.9	1.8	1.8	—
S. West	27.3	37.8	18.9	—	—	—	—	—	—	—
S. Central	16.1	26.7	42.1	—	.8	—	3.0	—	—	1.3
S. East	20.6	35.0	34.0	—	5.2	—	.3	.4	—	4.5
State	46.9	17.5	13.4	7.9	3.5	3.1	2.6	1.5	1.2	2.4

(1) The other varieties include Capital 0.8 percent, Mandarin 0.7, Patoka 0.4, Habaro 0.3, Monroe 0.1, Illini 0.1 percent, not estimable by crop reporting districts.

SOY SAUCE with egg foo yong.

THE COVER PICTURE

Soy Sauce Popular

Soy sauce, the soybean product featured on the front cover, is becoming more and more popular. "Our Chinese foods have approximately tripled in volume since World War II and soy sauce has more than kept pace," states La Choy Food Products, division of Beatrice Foods Co., at Archbold, Ohio. The firm distributes its Chinese food products from coast to coast from key market centers throughout the U. S.

People are not only using soy sauce on their Chinese foods and in various Chinese recipes, but are also finding that it makes a delicious sauce on steaks, chops, roasts and hamburgers. Many people like to marinate their steaks in the sauce before cooking as well as use the soy sauce in gravies, stews and chops.

All Chinese food manufacturers are constantly promoting soy sauce. La Choy Food Products now has under way the largest advertising campaign in the history of the company. It includes over 50 radio stations as well as Saturday Evening Post and four national women's magazines.

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TWO NEW SOYBEAN VARIETIES--

CLARK Is Adapted to MIDDLE AREA

HIGH YIELDING and high in oil content, a new soybean variety to be named Clark is being announced June 15 by the U. S. Department of Agriculture and cooperating state agricultural experiment stations. The small quantity of seed available will be increased on 3,000 acres in 1953. This will permit release to certified seed growers next spring for a build-up of planting stocks for general use by farmers in 1955.

Clark is another—the 11th—in a series of superior varieties that have been developed for various producing areas during a period of about a dozen years. It is adapted in an area that extends through the southern edge of the zone where the Lincoln soybean is now grown and in much of the area where growers now produce the Wabash variety. Included are southeastern Nebraska, northeastern Kansas, north and central Missouri, the southern edge of Iowa, the southern parts of Illinois and Indiana, the northern part of Kentucky, and areas of comparable climate eastward.

Resistance to Frog Eye

Of special interest to growers in some localities of its adapted area is the resistance of Clark to frog-eye leaf spot. In earlier years of soybean production, diseases were not an important factor in holding down yields, but more recently they have been building up and breeders have had to devote increasing attention to development of varieties with resistance. Frog-eye leaf spot has been one of the diseases causing major damage and losses in some Cornbelt localities in recent years.

Clark is no more or less susceptible to other soybean diseases than varieties now grown in its adapted area. Lincoln and Wabash also carry resistance to frog-eye.

In the northern part of its adapted area Clark is expected by the breeders to be well suited as a full-season variety that can be planted relatively early. In the southern part it should be early enough to precede a fall-sown small grain crop. Generally Clark is about one day earlier than Wabash and about a week later than Lincoln when grown under the same climatic conditions.

In plant characteristics, Clark is medium to tall in height, usually rather erect in growth, very similar to Lincoln but slightly taller and about seven days later in maturity. The plants have purple flowers whereas Lincoln has white flowers. Clark bears its pods—which are medium to large, mainly two- and three-seeded, and brown in color—primarily on the central stem. The seed is rather similar to those of Lincoln in shape and color, yellow with a black eye, but slightly larger.

Yield Compared

Clark has been compared in field performance to standard varieties in more than 120 tests at locations from Nebraska to Delaware, and in these tests has averaged five bushels higher in yield than Wabash or Chief, although it is slightly earlier than these varieties. At most locations Clark was even higher in yield than the Perry variety, which is a week later in maturity. It also is equal to the standard varieties in oil content and in resistance to lodging and shattering.

At locations in the southern part of the area in which Clark is being recommended, it averaged 41.9 bushels per acre over a two-year period compared with 35 bushels for Chief, 35.3 bushels for Wabash, and 38.2 bushels for Perry. In oil content it averaged 21.8 percent as compared with 20.3 for Chief, 21.3 for Wabash, and 21.7 for Perry. In seed quality it scored 1.9 compared with 2.2 for Chief, 1.8 for Wabash, and 2.1 for Perry, based on a 1-5 scoring system, with 1 representing very good and 5 very poor.

In the northern part of its recommended area during four years of testing Clark has averaged 40.8 bushels per acre compared with 35.1 for Adams, 36.3 for Lincoln, 35.3 for Illini, and 31.9 for Chief. Oil content of the Clark beans at the northern locations averaged 21.5 percent compared with 21.9 for Adams, 21.6 for Lincoln, 20.4 for Illini, and 20.5 for Chief. In seed quality Clark scored 1.7 against 1.9 for Adams, Lincoln, and Illini, and 1.8 for Chief.

The new variety is the result of 12 years of painstaking work in crossing, selecting, and testing by plant breeders. The work began in 1941 when Dr. M. G. Weiss, now in charge of field crop research for the Bureau of Plan Industry, Soils, and

MAP OF AREA OF ADAPTATION OF CLARK SOYBEAN SHOWING LOCATIONS OF FIELD TESTS.

Agricultural Engineering, made the first cross between Lincoln and Richland soybean varieties. During the following winter at the U. S. Regional Soybean Laboratory, Urbana, Ill., this hybrid was back-crossed to Lincoln by L. F. Williams in order to intensify the high-yielding and high oil characters. Thousands of selections were then tested to find the one best strain for release to growers.

Clark has been thoroughly tested by the various state agricultural experiment stations cooperating in the soybean improvement program. The Nebraska, Iowa, Illinois, Indiana, and Missouri stations will release it cooperatively to interested certified seed growers for planting in 1954. No seed is available for general planting this season and it will be 1955 before it becomes plentiful.

On the basis of its performance in experimental plots Clark should help to keep soybeans on the list of profitable crops in its adapted area. The increase of five bushels or more per acre that Clark will yield over varieties now grown in its adapted area can help reduce production costs per bushel.

Comparison of Clark with other varieties of soybeans over a 4-year period in the northern half of its recommended area

Variety	Average Yield Bu./Acre	Maturity index*	Lodging score†	Height in inches	Seed quality score‡	Seeds per pound	Oil %
Clark	40.8	0	2.0	40	1.7	2,853	21.5
Adams	35.1	-9.6	2.2	38	1.9	3,107	21.9
Lincoln	36.3	-6.6	2.1	40	1.9	3,107	21.6
Illini	35.3	-5.7	3.0	44	1.9	3,263	20.4
Chief	31.9	+1.2	2.8	50	1.8	3,410	20.5

*Days earlier (-) or later (+) than Clark. †Based on a score of 1-5; 1 is erect, 5 is badly lodged. ‡Based on a score of 1-5; 1 is very good, 5 is very poor.

Comparison of Clark with other varieties of soybeans over a 2-year period in the southern half of its recommended area

Variety	Average Yield Bu./Acre	Maturity index*	Lodging score†	Height in inches	Seed quality score‡	Seeds per pound	Oil %
Clark	41.9	0	2.0	39	1.9	2,820	21.8
Chief	35.0	+0.5	3.0	50	2.2	3,520	20.3
Wabash	35.3	+1.1	2.5	42	1.8	3,153	21.3
Perry	38.2	+7.0	2.1	40	2.1	2,735	21.7

*Days later than Clark. †Based on a score of 1-5; 1 is erect, 5 is badly lodged. ‡Based on a score of 1-5; 1 is very good, 5 is very poor.

INCREASE field of Harosoy soybeans in Middlesex County, Ontario, July 24, 1952.

Harosoy New Variety for Ontario

By C. W. OWEN

Assistant, Forage Crops
Dominion Experimental Station,
Harrow, Ontario

A NEW VARIETY of soybeans, Harosoy, has been released by the Dominion Experimental Station at Harrow, Ontario. This variety is expected to provide Canadian soybean growers with a variety having several characteristics favorable for a considerable portion of the soybean district.

As this district, which contains five counties in the extreme southwestern portion of the Province, is producing some 165,000 acres or about 90 percent of the total Ontario soybean crop, any varietal improvement suited to this district will have considerable influence on Canadian soybean production. The new Harosoy variety indicates adaptation to the major portion of this district.

The production of Harosoy involved a number of years work in crossing and selection. In 1936 a cross was made between the varieties Mandarin (Ottawa) and A.K. (Harrow) from which a strain was selected. In 1941 this strain was backcrossed to Mandarin. In 1945 the strain now named Harosoy was selected with testing commencing in 1946. Since that time tests have been conducted both at Harrow and in the district through Regional Soybean tests conducted by this station.

The variety Harman, which was released from the Harrow Station in 1944, occupies a considerable portion of the main district at the present time. Harman was released at a time when the soybean acreage was in the early stages of expansion and has found considerable favor with many growers since that time. It is expected that Harosoy will now replace a considerable portion of the Harman acreage since it has the advantages of earlier maturity, stronger stem, higher oil content and a pure yellow seed rather than the black hilum of Harman. While the type of plant is more attractive than that of Harman the color of the leaves may be deceiving to those growers who have become used to such varieties as Lincoln, Harman and Earlyana. The leaves of Harosoy are a lighter shade of green and lack the prominent veination of these other varieties.

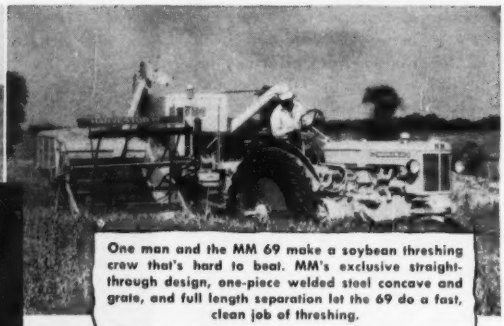
In addition to its value for Ontario conditions, which the local tests have indicated, this variety has also been included in tests conducted by the U. S. Regional Soybean Laboratory, Urbana, Ill.

Summary of Agronomic Data for Six Years at Harrow, Ontario, 1946-1951

Variety	Yield Bus.	Maturity	Height Inches	Lodging 0-10	Protein* %	Oil* %
Harosoy	28.1	-2.0	37.5	.65	38.4	20.4
Earlyana	24.4	-4.7	39.5	2.43	39.9	19.9
Hawkeye	23.1	0	35.6	.50	37.4	20.1
Harman	25.1	+3.8	34.8	1.63	41.0	13.7

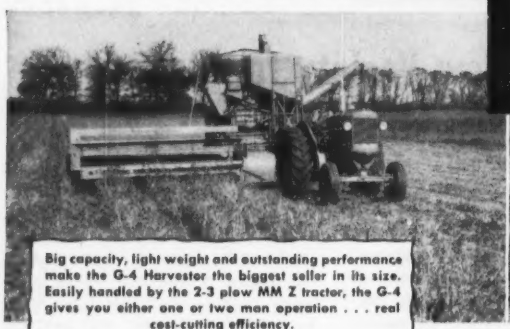
Hawkeye = 129.4 days
*Five-year average 1946-1950

The Mighty "S" Self-Propelled Powerflow Harvestor—now with new Powerflow Steering and a host of other exclusive new MM advantages. Available in 12, 13 and 14-foot sizes.



One man and the MM 69 make a soybean threshing crew that's hard to beat. MM's exclusive straight-through design, one-piece welded steel concave and grate, and full length separation let the 69 do a fast, clean job of threshing.

how all 4 MM HARVESTORS



Big capacity, light weight and outstanding performance make the G-4 Harvestor the biggest seller in its size. Easily handled by the 2-3 plow MM Z tractor, the G-4 gives you either one or two man operation . . . real cost-cutting efficiency.

The MM Uni-Harvestor—the one and only all-crop Harvestor. Shown here with the Uni-Combine attachment, the Uni-Tractor also mounts the 2-row Uni-Husker and Uni-Picker-Sheller attachments as well as the new Uni-Forage Harvestor.

cut your Soybean Harvesting costs!

For a high-yield, high-profit soy bean crop, you need harvesting that gets *all* your crop . . . gets it *clean* . . . gets it into the truck box in the *shortest possible time*, and at the *lowest possible cost*. That's why so many sucessful soybean growers are turning to MM Harvestors. Experience has shown that MM Harvestors have what it takes to do a top-notch job of harvesting under the toughest conditions . . . at savings that mean *extra* profits on every acre. Check the advantages below . . . ask your MM dealer about the dozens of others. Whether your farm calls for the MM Harvestor 69, the self-propelled S, the 12-foot G-4 or the pace-setting new MM Uni-Harvestor, you'll find that MM gives you a combine that's *built* for matchless performance . . . outstanding in the field!

MM *HEADERS GET ALL THE CROP*

Weedy conditions . . . tangled, wind-snarled vines . . . uneven terrain —MM headers take them all in stride. Guard fingers can travel as low as 2 inches above the ground to pick up flattened vines. High speed sickles give a positive *shearing* action that cuts vines cleanly, with less shock and vibration. These and other advantages let MM headers do an unbeatable job of gathering in your crops.

GENTLE "RUBBING" ACTION

Rasp bar cylinders and the exclusive MM all-steel, one-piece welded concave and grate thresh with a gentle "rubbing" action similar to rubbing out the beans between your hands. This gentle action prevents cracking the beans or chewing stalks to bits.

EXCLUSIVE MM *GRAIN PAN*

In the exclusive MM grain pan, fishback channels and a steep drop from grate to cleaning shoe prevents bunching of beans at sides or ends on rolling land. Beans are evenly distributed, evenly delivered to the cleaning shoe for better cleaning. The cleaning shoe stays automatically level and in its best working position regardless of the tilt of the Harvestor.

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The auger unloader (standard with every MM Harvestor unless otherwise specified), lets you unload a full bin in 60 to 90 seconds. With the Self-Propelled "S" and the Uni-Harvestor, you save precious minutes on every round by unloading *on the go*.

SEE YOUR MM DEALER FOR FACTS ON THE MM HARVESTOR THAT'S RIGHT FOR YOUR FARM

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AMERICAN SOYBEAN ASSOCIATION

Late News

Hudson, Iowa, June 10, 1953

Published 32 times yearly as a service to the soybean industry.

CCC TAKES OVER BEANS

The government took possession of some soybeans when loans expired May 31. **Commodity Credit Corp. estimated that it would take over about 2¼ million bushels, mostly warehouse stocks.**

A check of Commodity offices indicated about 2 million bushels would be taken over in the Minneapolis area, and about 250,000 bushels in the Kansas City area, mostly from Missouri.

Fewer farm-stored beans are expected to be delivered to CCC, as Commodity need not pick up farm stocks for 60 days. E. J. Murphy, acting director of CCC, assures us that issuance of delivery instructions on farm-stored beans by PMA county committees during this 60-day period can to a large extent be in accordance with the wishes of the producers holding the beans. **In the meantime they may take advantage of any market rise and pay off loans.**

As of Apr. 15, 14,104,245 bushels of soybeans had been placed under price support—6.3 million on farms, 5.4 million in warehouses, and 2.4 million under purchase agreement (both farm and warehouse). Redemptions up to Apr. 15 totaled 2.2 million bushels. **It appeared that less than 9.5 million bushels were unredeemed at the closing date on loans.**

CCC has turned down a suggestion of Geo. M. Strayer, secretary of the American Soybean Association, that it extend the closing date on soybean loans to avoid taking over any beans. CCC says this is against policy and believes there will be no hardship so far as farm-stored beans are concerned.

SOYBEAN CARRY-OVER?

Possibility of a sizable carry-over of 1952-crop beans into the next crop year has been discussed in trade circles. (See comment on page 4.) **CCC is not worried about disposal of beans it may acquire, says it will move them immediately into export channels.**

U. S. Department of Agriculture officials estimate carry-over stocks this fall at about 4 million bushels. Ending stocks have been running 3 to 4 million bushels for several years. **If they are correct, carry-over will be little if any larger than usual.**

CROP NOTES

Soybean planting progressed rapidly most places the first week in June and was virtually complete in some areas, including central Illinois, south central Indiana and southeast Missouri. Rains have delayed planting in Ohio, and **as little as 5 percent is planted in the Killdeer area.**

Some parts of the South now report rain is needed, including Little Rock, Ark.; Escambia County, Fla.; southeast Missouri; eastern North Carolina and Tennessee. Subsoil moisture is mostly still good due to earlier rains.

Soybean acreage is increasing in the Southeast. Escambia County, Fla., is increasing its acreage 35 percent. The Moultrie, Ga.,

area is growing 1,000 acres this year, where farmers are planting beans behind small grain and lupine. The locality grew none last year. (For complete earlier crop report see page 20.)

SPECULATIVE HEARINGS

Commodity Exchange Authority hearings on speculative limits on daily trading in soybean and other oils futures adjourned after a one-day session in Washington May 25. **They will be reopened July 13 at the CEA office, Board of Trade Building, in Chicago,** with J. H. Mehl, CEA administrator, in charge.

Trade generally opposed setting speculative limits on grounds they unduly restrict trading, but said if limits are kept they should be as large as possible.

Among those testifying were W. E. Huge, Central Soya Co., Fort Wayne, Ind., representing the soybean processors; William Hastings, Procter & Gamble Co., representing soybean oil refiners; and John J. Maloney, Memphis, of the National Cottonseed Products Association.

NEW FUTURES MARKET

Trading in soybean futures will be initiated at Memphis this fall by the Merchants Exchange Clearing Association there. The contract will be opened not later than Sept. 1, possibly Aug. 1. A multiple delivery contract will call for delivery at Memphis, Cairo, Ill., or St. Louis. Only other soybean futures market is in Chicago.

OIL SUPPLIES

Edible oil supplies through September will be substantially greater than last year, according to Bureau of Agricultural Economics. This reflects record stocks on Apr. 1 and an expected increase in output. However, commercial stocks on Apr. 1 were small, as **CCC holdings in cottonseed oil comprised about 75 percent of total stocks of all edible vegetable oils.** CCC move has bolstered soybean oil market.

	Cash price to farmers for No. 2 soybeans June 2	Retail cash price bagged soybean oil meal June 2
Ark.	$2.60 @ $2.65	$ 78
Fla.	2.60	86.40
Ill.	2.69 @ 2.73	83 @ $84
Ind.	2.67	
Kans.	2.40 @ 2.51	82 @ 84
Minn.	2.54	97
Mo.	2.72	
N. C.	2.65	100
Ohio	2.63	88
Tenn.	2.65	74
Ontario	2.60 @ 2.65	

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Hudson, Iowa

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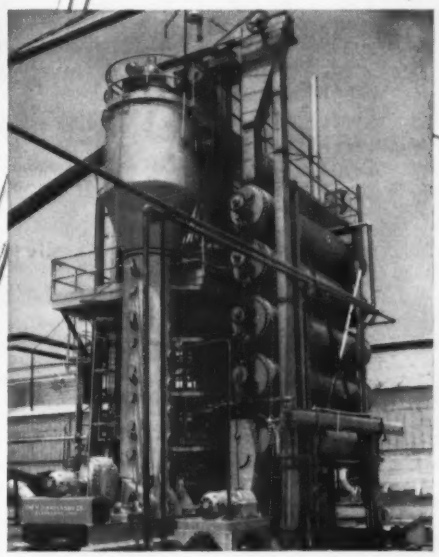

ANDERSON SOLVENT EXTRACTION PLANTS

- The oil milling problems of each local soybean oil miller vary greatly due to location, market conditions, climate and condition of materials processed. No one solvent plant could possibly meet all these conditions. Therefore, in order to better serve oil millers, Anderson supplies a variety of extraction equipment, which can be tailored to your individual specifications and requirements.

  If you are extracting soybeans alone, Anderson's proved straight solvent system is available with either a basket type or total immersion type column. These solvent systems can be erected either indoors or outdoors, whichever suits your need.

  For processors who might also handle oleaginous materials such as cottonseed, peanuts, linseed, etc., Anderson's Exsolex system will meet your most exacting requirements. Combining PreExpellers with Solvent Extraction, this integral system profitably extracts more oil at a lower cost per ton than any other process. Write today for complete information on Anderson tailored extraction systems.

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WORLD'S LARGEST SUPPLIERS OF...SOLVENT EXTRACTION • EXSOLEX

GAME'S in progress in Sportsmen's Park in St. Louis. You can see the Cardinals play Cincinnati there the evening of Aug. 21.

Time to Make Convention Plans

THE PROGRAM for the 33rd annual convention of the American Soybean Association, to be held at Hotel Jefferson in St. Louis Aug. 20 and 21, was beginning to take shape as the Digest went to press.

With no field day this year, the convention will be streamlined to four half day sessions, each one devoted to a separate phase of the soybean industry.

The program committee promises that the sessions will be packed as usual with solid information, and that speakers of the highest caliber from government, our colleges and industry will be on the program.

ASA conventions are the yearly meeting place of everybody in the soybean industry, a must if you want to keep informed on developments.

But there's plenty of chance to play also in St. Louis. In addition to other attractions, there is major league baseball and the St. Louis Municipal Opera. Blocks of tickets are being reserved for the Cardinal-Cincinnati game at Sportsman's Park Aug. 21; and to "Kiss Me Kate" at the Municipal Opera, which is held outdoors.

These tickets are being held for a limited length of time only, but must be turned back 10 days in advance of the convention in the case of the opera. Tickets to the ball game must also be turned back in advance of the convention.

So it is not too early to make your reservations, not only for the convention, but also for the ball game or the outdoor opera.

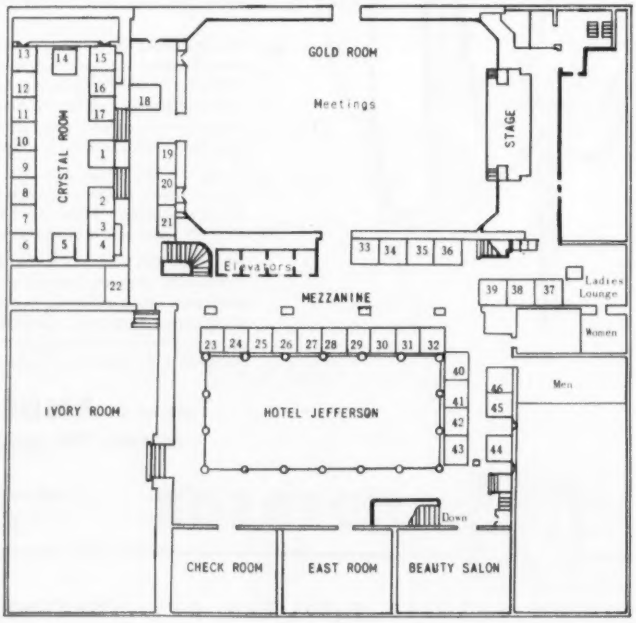
Make your reservations direct with Hotel Jefferson at St. Louis. Tell them your reservation is for the American Soybean Association convention, and it will be taken from the convention block of rooms.

Also let the hotel know if you wish tickets held for the ball game or the opera.

Exhibits

Below is shown the floor plan of the mezzanine floor of the Hotel Jefferson, St. Louis, where the annual convention of the American Soybean Association will be held Aug. 20 and 21.

All meetings will be held in the Gold Room. The Crystal Room and also the entire mezzanine floor will be given over to exhibit space this year. As you can see, all of the 46



booths will be in easy access of the meeting room.

Here you can meet your suppliers in person, visit with them—talk business if you want to.

Reservations for booths were coming in rapidly at press time, but a number of choice locations were still available. If you wish your firm represented by a booth at the convention, phone, wire or write:

Geo. McCulley, business manager, American Soybean Association, Hudson, Iowa.

The Convention in Brief

Aug. 20, 21—Formal sessions, Gold Room, Hotel Jefferson.

Aug. 20, evening—Annual banquet and presentation of honorary life memberships.

Aug. 21, 9 a.m.—Annual business meeting, American Soybean Association.

Aug. 21, evening—Your choice of baseball game, Cardinals vs. Cincinnati; "Kiss Me Kate" at St. Louis Municipal Opera, Forest Park; or river excursion on S. S. Admiral.

—s b d—

FDA TO MOVE AGAINST CHEMICAL SOFTENERS

The Food and Drug Administration will proceed at once to enforce a provision of the federal bread standards against use of the chemical bread softener "polyoxyethylene monostearate," Commissioner Charles W. Crawford has announced.

The FDA announcement followed action by the Eighth Circuit Court of Appeals at St. Louis, which vacated a previously ordered stay against enforcement of the softener ban. The Court agreed to hear an appeal by the Research Products Corp., but pending decision on that appeal FDA is authorized to enforce the prohibition against the use of the bread softener.

Crawford said, "As as matter of public responsibility these chemical softeners should be withdrawn from all foods until safety is proved, and until it is shown . . . that their use does not deceive consumers."

The softener ban was originally challenged by two other manufacturers, Atlas Powder Co. and Glyco Products Co.

The American Soybean Association opposes use of the softeners in bakery products.

Canadian Imports Continue Large

Canada's imports of soybeans and soybean oil, which made up 27 percent of the total importation of fats and oils in 1952, are expected to continue large in 1953, reports William L. Rodman, assistant agricultural attache, at the American Embassy, Ottawa, according to the U. S. Department of Agriculture's Foreign Crops and Markets.

Canadian soybean production in 1953 is again expected to be well below processor's needs. Flaxseed output will probably decrease due to a heavy carry-over of stocks and relatively low prices. Production of other oilseeds in Canada this year will probably remain near the 1952 level.

Edible oils imported in 1952 included cottonseed oil, 32,858 tons; soybean oil, 7,840 tons; peanut oil, 918 tons; sunflower oil, 1,068 tons; and 5,178 tons of other edible oils. Coconut oil imports totaled 8,375 tons and palm oil, 4,198 tons.

With the exception of the palm and sunflower oils, which came principally from the Belgian Congo and Uruguay, almost all of the above oils came from the U. S.

The oil equivalent of oilbearing materials imported in 1952, mainly soybeans from the U. S. and copra from the Philippines, amounted to about 50,000 tons.

The oilseed processing industry in Canada has expanded significantly during the last decade and now exceeds the domestic production of oilseeds. Canadian processors are finding it increasingly economical to import oilseeds for crushing now that ample facilities are available.

—s b d—

COTTONSEED DISPOSAL

Grave concern over the tremendous quantities of cottonseed products that have been accumulated under the federal price support program was recorded at the annual convention of the National Cottonseed Products Association in Los Angeles, which closed May 12.

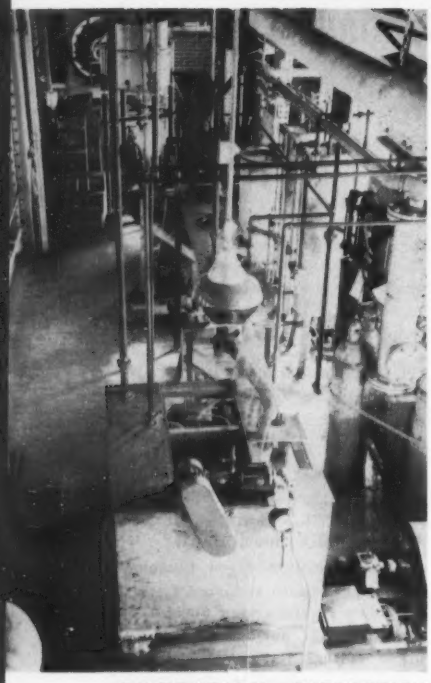
The Association urged Commodity Credit Corp. to announce a specific policy regarding the disposal of these products during 1953-54. It urged further that cottonseed and cottonseed products be permitted to sell in the free market, and voiced its opposition to proposals for disposing of CCC surpluses by dumping in foreign markets or government-to-government trading.

S. J. Vaughan, Jr., Hillsboro, Tex., was elected president to succeed W. B. Coberly, Jr., Los Angeles.

View of Hale Seed Farms

—Digest photo by Pellett

ARKANSAS SEEDSMAN. George Hale, Hale Seed Farms, Bardette, Ark., and a field of Hale Ogden 2 soybeans. In the background is the Hale home, which he built recently. Hale is widely known as a plant breeder. His Ogden selections are in use in many parts of the South.



FILTRATION - EXTRACTION plant, general view. Southern Regional Research Laboratory.

Progress on the Application of FILTRATION - EXTRACTION to the PROCESSING of SOYBEANS

By E. A. GASTROCK, J. J. SPADARO, and A. V. GRACI, Jr.

Southern Regional Research Laboratory, New Orleans, La.

FILTRATION-EXTRACTION is a new process for the direct solvent extraction of oilseeds without prepressing. It has been under development at the Southern Regional Research Laboratory for about two years. It derives its name from the fact that separation of the oil in hexane solution (miscella) from extracted meal (marc) and countercurrent washing with hexane are done on a continuous, commercial, horizontal, rotary vacuum filter. The process is built around the unit operation of filtration.

The process consists of first preparing the material by flaking (except for materials such as rice bran), cooking, and crisping; then bringing the oil into almost complete solution in a mixing vessel during a short soaking period, and then using the continuous filter for the separation of the oil from the meal by filtration and countercurrent washing. Oil and meal products are recovered by conventional methods.

The process has been applied to cottonseed and rice bran on a pilot plant scale. Commercial application of the process to extract primarily cottonseed is contemplated in a mill presently using the hydraulic pressing method.

As with other oilseeds, soybeans must be properly prepared for extraction to achieve optimum results. Consequently the following preparation methods were evaluated:

1—Conditioning the moisture and heat, and rolling operations similar to those used in conventional soybean solvent extraction plants.

2—Rolling and cooking operations similar to those used in hydraulic pressing of soybeans.

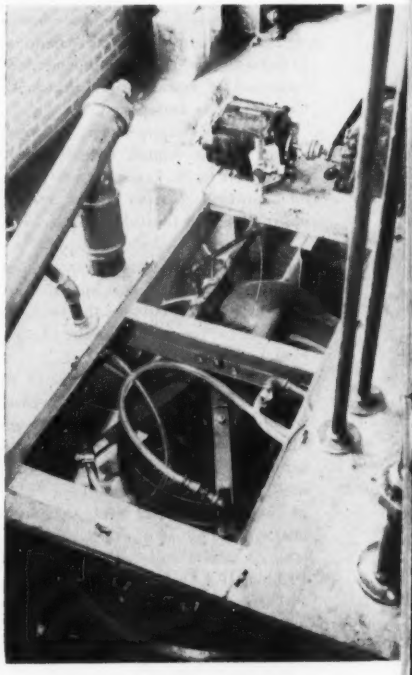
3—Modified rolling and cooking operations comparable to those found to give optimum results for the filtration-extraction of cottonseed.

Laboratory and pilot plant tests to date have shown that the first preparation method, that is, uncooked soybean flakes as generally used in the conventional direct soybean solvent extraction plants, gave poor filtration-extraction results. Filtration rates were very low, the filter flooded frequently, and residual lipids were high.

In the second method, the material was flaked and cooked as is normally done for hydraulic pressing except that the cooking time was slightly decreased to 68 minutes from a range of 75 to 90 minutes. Also the steam added to the first ring of the cooker was "wetter" than normally used in hydraulic mills. Tests with this material showed fairly good filtration-extraction characteristics. But, even the decreased cooking time of 68 minutes was considered unnecessary and too drastic to attain a high nitrogen solubility. Meals had a negative urease activity test.

The best filtration-extraction results were obtained with material prepared by the third method. This preparation consisted essentially of the following consecutive steps: Coarse cracking of the beans; removal of a large portion of the hulls by aspiration; conditioning the cracked meats; flaking to a thickness of approximately 0.010 inch; cooking the flakes for 20 to 30 minutes at temperatures from 190 to 225° F. using an adjusted initial moisture 15 to 17 percent in the first ring and a final moisture of 10 to 12 percent; evaporative cooling; and screening over an eight-mesh screen and reforming of the "overs" from the screen. Conditioning the cracked meats was attained by heating to about 145° F. for 15

ROTARY horizontal filter, top view. Southern Regional Research Laboratory.



minutes in the first two rings of a five-high cooker.

The prepared material was mixed with a miscella (No. 2 filtrate from the filter) to form a slurry. Retention time of the material in the slurry was 25 minutes at an average temperature of 108° F. The resultant slurry was filtered and countercurrently washed three times on a three-foot diameter continuous horizontal rotary vacuum filter all in a short period of less than three minutes. Filter pan speed was 2.5 minutes per revolution, and the cake thickness two inches. The filter medium consisted of a 60x60 mesh screen. The vacuum required ranged from one to two inches of mercury. The nitrogen blowback requirement was only 32 cubic feet per hour per square foot of filtering area. The ratio of solvent used (added as the final wash on the filter) to cooked material processed was 1.3 to 1.0 by weight.

The marc, as discharged to the dryers, contained only 28 percent solvent, 0.61 percent lipides and 7.4 percent moisture. The final desolventized meal had a residual lipide content of 0.57 percent.

The most concentrated miscella filtrate from the filter goes to the oil recovery system. This miscella had an oil content of 20 percent and a fines content of 0.3 percent. The small amount of fines was easily removed for miscella clarification in a pressure type filter. The oil was recovered in a conventional pilot plant evaporator and stripper. The resultant crude oil was of good quality in that the free fatty acid was 0.4 percent, refining loss was 2.9 percent, refined oil color was 70 Y - 2.3 R in a 1-inch tube and bleached oil color 20 Y - 1.2 R in a 5¼-inch tube. Color of the refined oil was dark, but it bleached to a light color.

The pilot plant results demonstrate the practicability of processing soybeans by the filtration-extraction process. This should be of particular interest to the small and medium size mills who desire to process both cottonseed and soybeans.

Initial development on the application of filtration-extraction to soybeans was done in cooperation with the Northern Regional Research Laboratory and the authors gratefully acknowledge helpful suggestions by O. L. Brekke of the engineering and development division of the Northern Regional Research Laboratory.

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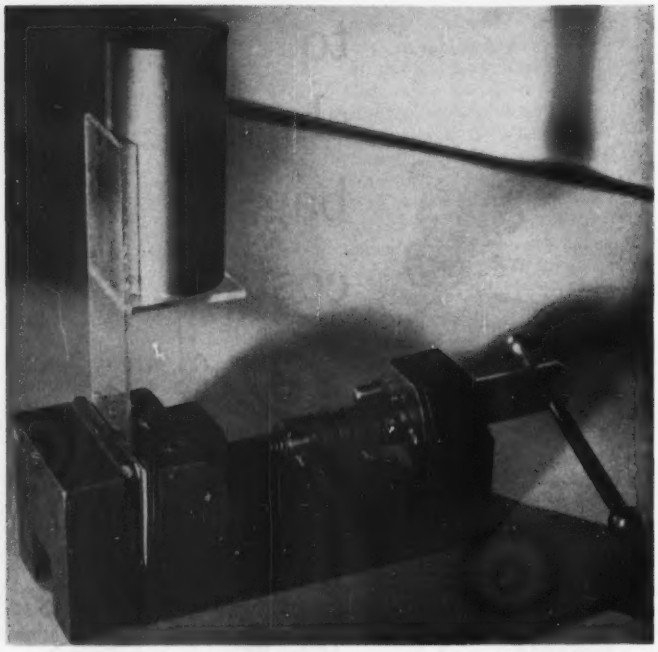
New Soy Product Has Wide Usage



GLASS-TO-GLASS bond made with polyamide resin-epoxy resin adhesive supports a five-pound chunk of solid steel. Bonds made with these adhesives show astonishing strength in holding together such materials as metal, glass, ceramics, fabric and wood.

GENERAL MILLS research chemists have found that certain polyamide resins are effective curing agents for epoxy resins yielding versatile new resin products ranging from tough adhesives to paper coatings, casting and potting compounds, and protective finishes.

According to Dr. Ralph Manley, managing director of General Mills Research, mixtures of polyamide and epoxy resins produce compounds with characteristics far different from either parent resin.

Polyamide-epoxy resin combinations are useful over a wide range of applications. Good results have been obtained using them as clear finishes to provide a glossy surface for furniture and other materials—a finish which protects against household chemicals, water-spotting, and common solvents.

This finish also can be applied over printed material during the printing process, giving paper, foil, or plastic films a high gloss surface which is resistant to scuffing, rubbing and wear. Papers treated with this finish will act as a barrier to oil and grease and are not damaged by water or such solvents as gasoline, turpentine, alcohol or carbon tetrachloride. Printed labels which are over-coated with the finish are highly resistant to abrasion.

Possible uses in the packaging industry are obvious. Trials show that these finishes should work well on imitation leather, upholstery, luggage, book covers, and similar surfaces.

The same combinations can be pigmented to yield hard, tough, glossy enamels. They should be useful for refrigerators, washing machines, stoves, drum linings, laboratory bench tops, and similar applications, especially in primer applications.

Polyamide-epoxy resin combinations have been tried in casting and potting work, producing substances that are highly heat and cold resistant with low heat-distortion, low shrinkage, high mechanical and impact strength, good electrical properties and high resistance to chemicals and oils. They look promising for such electrical embedment work as transformers, leads, condensers, batteries, coils, resistors, and printed circuits. They also provide useful insulating varnishes.

Other combinations of these two resins produce adhesives which seal together such unlike surfaces—either porous or non-porous—as metal, glass, paper, plastics, natural rubber, neoprene and wood. They can be used as resinous binders for the lamination of glass cloths or glass fiber mats. The adhesives show no shrinkage, no loss in bulk, give high-strength bonds, and are not softened by heat or seriously affected by moisture and humidity conditions.

General Mills' Polyamide Resins come from polymerized vegetable acids, including soybean, by reaction with diamines. Epoxy resins, on the other hand, come from the union of chemicals with ancestors in the petroleum industry. Dr. Malcom M. Renfrew, director of chemical research at General Mills Research Laboratories, and Dr. Harold Wittcoff, section leader in the product development end of chemical research, discovered the superior properties of the blend and with cured mixtures of resins.

— s b d —

SUEZ SHIPMENTS UP

Bulk shipments of Chinese soybeans through the Suez Canal during the first quarter of 1953 were 3.5 million bushels, or more than three and one-half times the volume through the Canal in the first quarter of 1952, according to a report from Port Said, reported by the U. S. Department of Agriculture's Foreign Crops and Markets.

In the last half of 1952 only a single cargo of 11,199 tons was recorded.

The January-March shipments of Chinese soybeans through the Canal consisted of 10 cargoes, mostly from Dairen, China. They were bound for Hamburg; Copenhagen; Gdynia, Poland; Novorossisk, Soviet Union; and Rotterdam.

First quarter shipments were at about 90 percent of the 1951 movement for a like period.

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Shift to Soybeans from Cotton Acres

IT NOW APPEARS there will be little reduction in soybean acres compared with last year in the Midsouth —or anywhere else for that matter. A reduction of up to 15 percent in the Delta areas of Arkansas, Missouri, Tennessee, and Louisiana was forecast earlier, where cotton was expected to replace soybean acres.

But there was excessive rainfall the first half of May in southeast Missouri, Arkansas, Tennessee, Mississippi, Louisiana and Kentucky. Little field work was done and it appeared that much cotton was being abandoned in favor of soybeans. Outlook as of June 1 was for a soybean acreage equal to that of 1952 in the area, more if this sort of weather should continue.

Apparently there will be a substantial increase in soybean acreage in Minnesota, in southwestern Ontario, southwestern Alabama, and in small areas along the western borders of Minnesota, Iowa and Missouri.

Elsewhere little change in acreage as compared with 1952 is indicated.

Little progress was made in soybean planting in the Midsouth during May where it was most advanced earlier. Elsewhere it was getting well under way by June 1, with half or more of the acreage planted in some areas in Iowa, Illinois and Ohio.

Stands were good where beans had emerged and prospects for weed control were favorable. Exceptions were the excessively wet areas of the Midsouth where many stands were poor and a bad weed problem may be in the making; and in Ohio where there has been an excess of rain that has brought out lots of weeds.

Moisture Adequate

With at least normal rainfall during May most places, both surface and subsoil moisture supply is now normal or above almost everywhere in the bean belt. Only exceptions are spots in Kansas, Iowa and Illinois.

Pre-emergence spraying has been tried on small acreages in Illinois and Ohio. It was tried on about 20 percent of the acreage in northeast Louisiana, not too successfully due to the heavy rainfall.

Spot reports:

Arkansas

Jake Hartz, Jr., Jacob Hartz Seed Co., Stuttgart (May 20): Rice this area 15 percent planted, 1952 same date 85 percent. Rain to date 34 inches plus last year's total 44 inches. Weeds and grass taking fields that have been worked. Plowing will be necessary. Soybeans will be increased over intended acreage providing weather turns good. Most farmers will not plant cotton or long rice after June 1. Early frost can ruin Arkansas field crops.

Illinois

J. E. Johnson, Champaign (May 21): Have used Sinox P. E. for pre-emergence spray in trial plots, also small fields. Believe that wild millet, called giant foxtail, can be controlled considerably with chemical treatment.

Walter McLaughlin, Citizens National Bank, Decatur (May 22): Beans just beginning to come up. Should have good stands as ground was in good shape.

Louisiana

Scott Plantations, Tallulah (May 20): This section has had 16 to 20 inches of rain the last 20 days resulting in much planting over of cotton and soybeans. Some cotton has been planted the third time. Some cotton acreage may go into soybeans as a last resort.

Missouri

Dwight L. Dannen, Dannen Mills, Inc., St. Joseph (May 20): Soybeans cutting in on wheat and oats. If season is late will cut in on corn.

O. H. Acom, Wardell (May 20): No work this month, only two days of sunshine. Some cotton to go into beans due to rains on cotton acres.

Ohio

D. G. Wing, Mechanicsburg (May 21): Weeds will be bad if it does not stop raining. Corn will be late in planting so more beans may go in.

Ontario

K. A. Standing, Ontario Soybean Growers' Marketing Board, Chatham (May 20): Wet weather has delayed corn planting. There may be some shift to soybeans from corn and perhaps sugar beets. Definite shift from oats to soybeans due to weather.

— i b d —

1952 WORLD CROP CLOSE TO ALL-TIME RECORD

WORLD PRODUCTION of soybeans in 1952 is estimated by the Foreign Agricultural Service at 669 million bushels—only one million bushels short of the record 670 million produced in 1950, according to U. S. Department of Ag-

SOYBEANS: Acreage, yield per acre, and production in specified countries and the world, averages 1935-39 and annual 1950-52 (1)

Continent and country	Acreage (2)			Yield per acre			Production		
	Average 1935-39	1950	1952 (3)	Average 1935-39	1950	1952	Average 1935-39	1950	1952 (3)
	1,000 acres			bushels			1,000 bushels		
NORTH AMERICA									
Canada	(4) 10	142	172	21.3	23.4	24.0	(4) 207	3,323	4,128
United States (5)	3,042	13,814	14,075	18.5	21.7	20.7	56,167	299,279	291,682
EUROPE									
Italy	(6) —	2	2	12.1	17.9	22.9	(4) 1	26	51
Yugoslavia	5	32	—	14.9	4.6	—	74	149	—
Other Europe	93	79	95	—	—	—	1,067	410	477
U. S. S. R. (Europe and Asia)	(7) 607	—	—	—	—	—	(7) 5,805	—	—
ASIA									
Turkey	(7) 1	5	7	29.0	13.4	14.9	(7) 37	66	110
China proper (22 provinces)	12,411	—	—	16.7	—	—	207,666	—	200,000
Manchuria	8,992	7,400	—	16.8	16.8	—	151,294	124,000	125,000
Indonesia (8)	889	808	1,063	11.0	11.1	9.7	9,731	9,002	10,343
Japan	797	1,021	1,013	15.6	16.1	18.9	12,338	16,421	19,161
Korea	(4) 1,921	599	—	10.0	7.3	—	17,654	4,377	—
Taiwan (Formosa)	(4) 17	50	—	8.9	9.2	—	(4) 151	460	—
SOUTH AMERICA									
Brazil (10)	—	—	149	—	—	19.4	—	1,310	2,885
AFRICA									
Tanganyika	—	—	—	—	—	—	—	31	—
Union of South Africa	—	9	—	—	6.3	—	—	55	110
Total excluding "Other Europe," U. S. S. R., Chinese Mainland and North Korea	5,670	16,665	17,320	—	—	—	87,185	335,700	334,640
World Total (11)	29,000	37,575	37,795	—	—	—	463,720	670,070	669,080

(1) Years shown refer to years of harvest. Southern Hemisphere crops which are harvested in the early part of the year are combined with those of the Northern Hemisphere harvested the latter part of the same year. (2) Figures refer to harvested areas as far as possible. (3) Preliminary. (4) Average of less than five years. (5) Acreage harvested for beans. (6) Less than 500 acres. (7) One year only. (8) Java and Madura only. (10) Rio Grande do Sul and Sao Paulo. (11) Includes estimates for the above countries for which data are not available and for minor producing countries.

Foreign Agricultural Service. Prepared or estimated on the basis of official statistics of foreign governments, reports of United States Foreign Service officers, results of office research, or other information. Prewar estimates for countries having changed boundaries have been adjusted to conform to present boundaries, except as noted.

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riculture's Foreign Crops and Markets. This estimate is 19 million bushels or 3 percent larger than the first forecast of the crop.

Over 90 percent of the estimated world production of soybeans is concentrated in the United States and the Chinese mainland. Roughly one-half of the total is produced in the free areas of the world, with the United States alone accounting for about 45 percent in recent years.

Soybean production is believed to have increased in all the important producing areas of the world in 1952, with possibly the most significant expansion in the Chinese mainland. There were sizable increases also, however, in the United States, and the secondary-producing countries — Japan, Indonesia, Canada, Brazil, and Thailand. Even Turkey and the Union of South Africa report record harvests in 1952.

Possibly the only area of the world where output declined is Europe. The bulk of the European soybeans are grown in the Balkan area, and the severe drought in 1952 undoubtedly reduced production sharply.

The estimate of output in the Soviet Union is largely speculative.

The United States harvested 291.7 million bushels of soybeans in 1952, the second largest crop of record.

Canadian production set a new record for the ninth successive year.

Production in China is estimated at roughly 325 million bushels—200 million in China Proper and 125 million in the northeast area (Manchuria). Production in both areas is not up to prewar levels. (For a more complete report see page 21, May Soybean Digest.)

Production in Indonesia (Java and Madura) is reported at 10.3 million bushels—up over 10 percent from 1951 and 6 percent from the prewar average. Acreage has increased gradually in the past few years.

Japan's production also was up 10 percent from 1951 to 19.2 million bushels despite a slight decrease in planted area. This was the highest level of production since the early 1920's. Soybean production has shown rapid expansion in this country in recent years.

Thailand and Formosa have increased acreage and production of soybeans markedly from prewar and immediate postwar years. And even more significant has been the expansion in Brazil where output, which was insignificant in prewar years, is now close to 3 million bushels. Further expansion is expected this year.

The largest producer in Africa probably is Nigeria where purchases for export have been reported at around 300,000 bushels. The Union of South Africa ranks second with production of around 110,000 bushels.

Announces Plasticizer, Alcohols

THE INTRODUCTION of a new polymeric type vinyl plasticizer now links the Archer-Daniels-Midland Co. of Minneapolis directly with the plastics industry, according to an announcement made by Thomas L. Daniels, company president.

"This new plasticizer will be used in the manufacture of a multitude of products that range all the way from floor coverings and inflatable toys to wire coating and packaging materials," Daniels said.

The vinyl plasticizer is a light-colored, odorless liquid which is used by manufacturers of vinyl plastics in combination with vinyl resin powder. Produced in their Decatur, Ill., plant, the main purpose of this plasticizer is to make plastics soft and flexible.

Daniels pointed out that the new vinyl plasticizer offers many improved features including very good low-temperature flexibility, excellent ultra-violet light resistance, and excellent heat resistance.

As one of the leading processors of agricultural crops, ADM has been keeping pace with the immense growth of the chemical products industry through expanded new-product research on soybeans, flaxseed, and other agricultural crops. ADM's new vinyl plasticizer continues to broaden the market for agricultural products in that the product is processed from soybean oil. "This new venture is an outgrowth of other activities in the protective coatings field. For example, our lacquer plasticizers have been leaders in that market for many years," Daniels said.

New Chemicals

A new group of basic chemicals will be made available to the chemical industry in 1954 according to Thomas L. Daniels, president of Archer-Daniels-Midland Co. The new products which will consist of unsaturated higher alcohols will be produced at a new chemical plant located at Ashtabula, Ohio.

According to Daniels many of the alcohols which will be made at the new plant are not commercially available today. Vegetable, animal and marine fats and oils, including soybean oil, will serve as the principal raw materials.

The new alcohols which promise many advantages over those now commercially available are expected to find a ready market in new types of detergents. They will be used in countless other products including vinyl plasticizers, shampoos, lubricating oil additives, corrosion inhibitors, anti-foam agents, peptizers for synthetic rubber, cosmetics, pharmaceuticals, anti-oxidants, agricultural chemicals, synthetic waxes and textile finishes.

ADM has been manufacturing fatty alcohols and glycerides since 1936.

Frank C. Haas, vice president in charge of the ADM chemical products division which has its headquarters at Cleveland, will be in charge of the new operation.

Because ADM is a major processor of linseed, soybean and marine oils, it is expected these products will be the principal raw materials used for the new alcohols. While coconut oil has long been favored as a raw material for the production of alcohols, its chemical composition is such that conversion into fatty alcohols results in only 10 percent recovery in alcohols above C_{18}. On the other hand, the soybean molecule would produce approximately 92 percent of these higher alcohols and linseed oil 95 percent.

The use of linseed and soybean oils as a major raw material for higher alcohols is long past due, according to Haas. The linseed oil molecule contains more than 800 combinations of fatty acids while the composition of the soybean oil is almost as complex. These, in the opinion of Haas, are two of the most promising but least explored molecules in existence.

PUBLICATIONS

For a complete list of books on the soybean crop and industry and related subjects drop a postcard to Circulation Department, Soybean Digest, Hudson, Iowa.

SOY FLOUR. Soy flour is available to the food industry for increasing the value of bread and furnishing desirable properties to doughnuts, crackers and other bakery products.

All soy flours have characteristic flavors. These can be varied by proper selection of beans and by processing procedures.

The effect of 5 percent of soy flour on the flavor of white bread was determined in studies at the Northern Regional Research Laboratory. The flour used was a composite mixture of four samples of the commercial product furnished to the Laboratory by individual companies. The composite sample was furnished to the pilot bakery of the department of milling industry, Kansas State College, where bread was prepared in commercial equipment by the sponge-and-dough procedure.

Flavor tests and other studies were made on three different bakes containing 5 percent soy flour or 4 percent dry milk solids at the Northern Laboratory. More than 280 judges from the staff in 1,300 tests were unable to find a significant difference between the breads. The use of soy flour up to 5 percent should not affect its acceptance by consumers, according to the Laboratory.

REPORT OF THE CHIEF OF THE BUREAU OF AGRICULTURAL AND INDUSTRIAL CHEMISTRY, AGRICULTURAL RESEARCH ADMINISTRATION, 1952. U. S. Department of Agriculture, Washington 25, D. C.

SEED TREATMENT. Stands of soybeans have been increased consistently by chemical seed treatment in greenhouse tests in Minnesota, especially when the seeds are mechanically injured, moldy, badly weathered, or planted in soil infested with one or more soil-borne diseases.

Similar effects can be demonstrated in field tests. Rarely, however, did increased stands produce increased yields. However, the seed was always protected to some extent and was injured only once in these tests. In view of that, a grower may want to treat the seed for the added protection derived from seed treatment.

If soybeans are planted in ground that has never produced the crop, it appears that the most feasible practice is to use the inoculant and dispense with seed treatment.

EFFECT OF SEED TREATMENT ON YIELD AND NODULATION OF SOYBEANS IN MINNESOTA. By M. F. Kernkamp, F. I. Frosheiser, and J. W. Gibler, department of plant pathology and botany, Minnesota Agricultural Experiment Station, St. Paul, Minn. Plant Disease Reporter, 37:222-225, 1953.

GIANT FOXTAIL. Giant foxtail has already become a serious pest in cultivated crops in some Cornbelt states, and is gradually spreading into new areas.

It appears probable that giant foxtail may become most troublesome on bottomlands where continuous culture of corn and soybeans is prevalent. It is much less likely to cause serious trouble in fields where a three- to five-year rotation is followed.

GIANT FOXTAIL. By Ralph Kenney, J. R. Hansen, and J. F. Freeman. Leaflet 132. University of Kentucky, Lexington 29, Ky.

MISCELLANEOUS

SOYBEAN VARIETIES FOR ILLINOIS. By J. W. Pendleton, R. D. Osler, C. H. Farnham and J. L. Carter. Circular 700. University of Illinois, Urbana, Ill.

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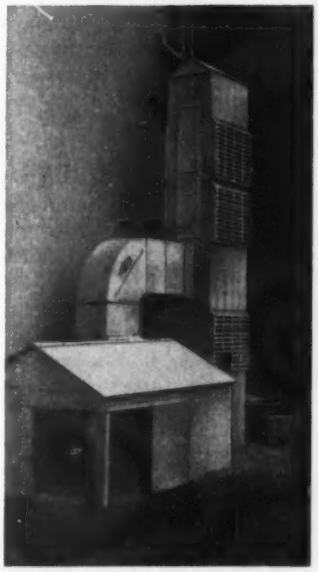

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Are Swine Fed too Much Protein?

Results of Illinois tests indicate that less crude protein is needed in drylot rations of growing-fattening pigs than has heretofore been recommended. Twelve percent protein was superior to 10 percent, but 14 and 16 percent were not better than 12 percent in drylot rations of the weanling pig up to 100 pounds liveweight.

When feeding rations contained at least 12 percent crude protein, the daily gains of pigs fed the corn-soybean oil meal ration were equal to those of pigs on a corn-fish meal ration.

RESULTS OF FEEDING DIFFERENT LEVELS OF CRUDE PROTEIN TO GROWING-FATTENING PIGS IN DRYLOT. By D. E. Becker, J. W. Lassiter, S. W. Terrill, and D. I. Gard. Illinois Swine Growers' Day, University of Illinois, Urbana, Ill.

Protein Standards High?

Michigan workers suggest that our present standards for protein for pigs may be higher than they need to be. Pigs receiving a 15-percent-protein ration, containing soybean oil meal, that was reduced to 12 percent at 100 pounds did just as well as pigs receiving an 18-percent-protein ration reduced to 15 percent at 100 pounds. Both rations contained soybean oil meal. But the rations used had a high level of B vitamins and this may have been related to an increased efficiency of protein utilization.

THE EFFECT OF TERRAMYCIN ON THE GROWTH OF PIGS FED DIFFERENT LEVELS OF PROTEIN. By J. A. Hoefer, R. W. Luecke, F. Thorp, Jr., and R. L. Johnston, Michigan Agricultural Experiment Station, East Lansing, Mich. Journal of Animal Science, August 1952, Vol. 11, No. 3, pages 455-458.

B-12, Antibiotic

THE UTILIZATION OF FOOD ELEMENTS BY GROWING CHICKS. XIV. EFFECT OF THE ADDITION OF VITAMIN B-12 AND ANTIBIOTIC. By C. W. Ackerson, R. L. Borchers and F. E. Mussehl, University of Nebraska, Lincoln, Nebr. Poultry Science, November 1952, Vol. 31, No. 6, pages 1023-1026.

FEEDING

LETTERS

Need New Standards

To the Editor:

I departed from Tokyo on Aug. 25, 1952, for a second visit to the United States after 20 years. I had an invitation from the American Soybean Association to attend its 32nd annual convention and to speak as a representative of the Japanese oil industry.

In addition, the concrete objectives of my visit included a visit to the U. S. Department of Agriculture, and with American exporters, explaining the disadvantages and losses incurred by Japanese oil mills owing to inferior American soybean quality; a study of the American soybean industry, its production, business methods, and the supply and demand situation; the investigation of loading conditions and the inspection system.

My trip was very successful and I was able to fulfill the greater part of my objectives.

After the war it became practically impossible for Japan to import soybeans from China, as she did before the war, and we had to rely solely on American soybeans. I estimate about 300,000 to 350,000 tons are yearly requirements. But the quality of American soybeans which we imported in the past was not uniform. Foreign material was considerably higher than that contracted for.

We naturally felt it worthwhile to try federal inspection in addition to the usual licensed inspection. I recommended that the Association of Oil Manufacturers in Japan include this as a condition of future transactions . . . I was surprised to be informed that the North American Grain Exporters Association in New York had passed a resolution refusing to approve federal inspection in soybean sales to Japan.

On arrival in Tokyo I was glad to learn that the resolutions had been revoked. Within two weeks after that, nearly all of the shippers agreed to federal inspection. All contracts since then have been made with this condition included.

On examining the cargoes arriving under the revised contract terms, it

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was noticeable that the content of foreign matter greatly improved, if it was not fully up to standard. Formerly, business was done only in No. 2, but now trade in No. 3 and 4 appeared, due to foreign matter content. The buyers have been put in a better position than before.

However, it appears that the basic solution of improving the quality of American soybeans is still a long way off. I think this is a difficult problem unless steps are taken to improve the grading standards. This is an absolutely necessary condition for improving the reputation of American soybeans both in the United States and abroad.

I sincerely hope that the U. S. Department of Agriculture will next take up the problem of revising the grading standard as early as possible.

No doubt, production of soybeans in the United States will be increased further and the U. S. must expand its foreign market. However, there is some indication that Chinese soybeans may again become as active as before.

I wish to express my sincere gratitude to the officials of the U. S. Department of Agriculture, to exporters, grain elevator people, to the officials of the American Soybean Association, and to all those who gave me their assistance and guidance during my trip.—*Mitsuo Hirano, president, the Association of Oil and Fat Manufacturers of Japan, Tokyo.*

Survey in Burma

To the Editor:

This firm has been retained by the government of the Union of Burma to conduct an economic and technical survey of that country. In this connection, we are exploring the potentialities of soybean products, among others, for extensive development in the Far East.

We are hopeful of obtaining any descriptive literature and data which may be available on methods, equipment, costs, plant design, manpower and any other requirements, from you and from any other sources you care to suggest.

We will be most grateful for any assistance you can furnish along these lines.—*E. D. Dodge, Knappen-Tippetts-Abbett-McCarthy, New York, N. Y.*

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GRITS and FLAKES... FROM THE WORLD OF SOY

◆ The Skadberg-Olson Co., organized to do architecture, engineering and consulting for feed, food and soybean processing plants, has been formed by Paul A. Olson, well known in the feed and milling industry, and Leif Skadberg, in the architectural and engineering business for 20 years. Olson was manager of the soybean division of the Glidden Co. at Chicago from 1937 to 1950, and since has been in charge of construction and operation of a soybean plant for the Quincy Soybean Products Co., Quincy, Ill.

◆ The Glidden Co.'s "Spred Satin" has been produced by the Bjerke firm of Oslo, Norway, under an exclusive royalty agreement since 1948, it was revealed during the recent visit to Glidden's Cleveland headquarters of Alf R. Bjerke, joint owner of the Norwegian firm. An objective of Bjerke's visit was to broaden the scope of the agreement with Glidden to include technical coatings used in the industrial field.

◆ Central Soya Co., Inc., Fort Wayne, Ind., has announced the appointment of Carl A. Lechner Co., Chicago, to represent it in the sale of "Centrol" lecithin to the protective coating and allied fields in the Chicago and surrounding territory.

◆ *Dr. David W. Anderson, Jr., formerly head of the nutrition and bacteriological research laboratories for the H. J. Heinz Co., has joined the Borden Co.'s special products division as technical services director.*

◆ Paul R. Ray, until recently manager of the soybean division of A. E. Staley Manufacturing Co., Decatur, Ill., has been elected a vice president of Burrus Mills, Inc., and appointed general manager of Burrus Feed Mills, Dallas, Texas. He succeeds J. C. Mitchell as general manager of the feed mills.

◆ Election of William G. Phillips as treasurer and a director of the Glidden Co. has been announced by Adrian D. Joyce, chairman of the board. W. P. Stetzelberger, staff assistant in the legal department, has been elected to the position of assistant secretary of the company.

◆ The American Feed Manufacturers Association has reelected J. D. Sykes as chairman of the board of directors and H. J. Buist as vice chairman. Sykes is vice president in charge of public relations of Ralston Purina Co., and Buist is president of Allied Mills, Inc. The 1954 convention will be held at the Conrad-Hilton Hotel, Chicago, May 5-7.

◆ *T. W. Lord, president of the Western Safflower Corp., Denver, has announced plans for building a safflower oilseed mill at Colorado Springs, to be completed Sept. 1.*

◆ The Falk products division of Cargill, Inc., announces its New York staff has moved to larger quarters at 615 River Road, Edgewater, N. J., to enable the division to serve its customers more efficiently. The new telephone number will be Cliffside 6-7053. Local New York phone is Enterprise 6007.

◆ Soybean production maps for 1952 have been issued for Illinois, Indiana and Ohio by Nickel Plate Railroad, Cleveland, Ohio. Planted and harvested acreage and bushelage by counties and location of processing plants are shown.

◆ A. W. Klemme, University of Missouri extension soils specialist, has been honored with the presentation of a plaque for his "untiring work to make our soils afford greater opportunities in agriculture." The plaque was awarded by northeast Missouri soybean growers who made the presentation through the MFA Cooperative Grain and Feed Co. of Mexico, Mo.

DANNEN PASSES

HENRY L. DANNEN

Henry L. Dannen, 69, president and founder of Dannen Grain & Milling Co., St. Joseph, Mo., died at his home there recently.

Dannen pioneered in the formula feed business, establishing his company in 1910 and expanding its operations to include a soybean processing plant, terminal and country grain elevators, and a research farm.

The Dannen firm brought about the development of soybean growing in the area around St. Joseph. The company shipped feeds and soybean oil meal into 25 states last year.

The processing plant was built in 1939. At the present time it has a 220-ton daily capacity, with storage facilities of well over 2 million bushels.

Dannen's survivors include his widow; a son, Dwight L., who is vice president of the firm; and a daughter, Mrs. Charles Mannschreck, also of St. Joseph.

—sbd—

HEADS OIL CHEMISTS

Election of Procter Thomas, Cincinnati, Ohio, as president of the American Oil Chemists' Society, was announced at the 44th annual meeting held in New Orleans, La., May 4-6.

Other officers elected were C. E. Morris, Chicago, Ill., vice president; T. H. Hopper, New Orleans, La., secretary; and A. F. Kapecki, Chicago, Ill., treasurer.

Elected board members at large were: H. C. Black, Chicago, Ill.; J. C.

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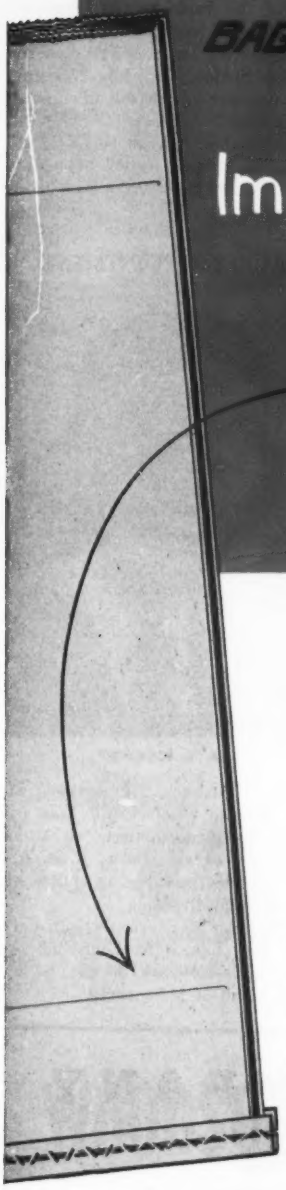

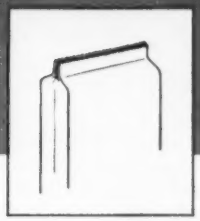

The more easily closed PREFORM bagtop first introduced in this country by Bagpak—and now tremendously successful—has been further improved with the PREFORM feature at the bottom—at no additional cost.

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◆ *William C. Lovejoy, credit manager of Fulton Bag & Cotton Mills, retired May 10 on his 33rd anniversary with the company. He is succeeded by Wylie K. White, formerly assistant credit manager at Fulton Bag.*

◆ D. W. Peiper is the new manager of Western Soybean Mills, Sioux Falls, S. Dak., succeeding Richard W. Kerley, who returned to Dawe's Laboratories, Inc., Chicago. Jack Pfautz is new sales manager.

◆ Fulton Bag & Cotton Mills, Dallas, Tex., announces the appointment of James A. Spaulding to its sales staff, effective immediately. He will headquarter in Austin and represent Fulton in the central southern section of Texas.

◆ Dr. W. M. Beeson, animal husbandry department, Purdue University, one of three to win the $1,000 annual award of the American Feed Manufacturers Association to the nation's top research scientists in livestock and poultry nutrition, was accorded additional recognition at the AFMA convention in Chicago May 14.

◆ *H. J. Barnum, Jr., formerly associated with Beechnut Packing Co., has joined the Good Luck division of Lever Brothers Co. as manager of special products.*

◆ The appointment of Wyman L. Sooy, Decatur, Ill., as territory manager for central Illinois has been announced by the formula feed department of A. E. Staley Manufacturing Co. He was formerly sales representative for Pecks Products Co., St. Louis, and manager of the Prairie Farm Creameries at Carlyle, Ill.

◆ Pillsbury Mills, Inc., recently honored R. D. Jones, Sr., regional sales manager, for over 40 years continuous service with the company. In 1946 he was named regional sales manager for the feed and soy division Western region which covers the entire area west of the Rockies.

◆ The Phillip H. Postel Milling Co., Mascoutah, Ill., will discontinue soybean processing operations, it is announced. The firm under the management of J. W. Huegely, will continue as a country elevator and manufacturer of feed for the local trade.

◆ *James M. Kidd, Jr., vice president of Sunnyland Refining Co., Birmingham, Ala., has been elected a director of the National Association of Margarine Manufacturers, it has been announced by S. F. Riepma, president.*

◆ H. V. Nootbaar, H. V. Nootbaar & Co., Pasadena, Calif., has been elected president of the California Hay, Grain & Feed Dealers Association. He was vice president for the term just ended.

◆ Among U. S. Department of Agriculture employees given annual honor awards for superior accomplishment at Washington May 19 was C. R. (Dutch) Elder, Iowa State College farm editor, Ames, Iowa.

Konen, Minneapolis, Minn.; and W. A. Peterson, Jersey City, N. J.

Second event on the 1953 calendar of the American Oil Chemists' Society will be the short course scheduled for Texas A & M College, College Station, Tex., July 27-31, on the engineering phases of oilseed processing.

Registration fee will be $50, payable in advance to the American Oil Chemists' Society, 35 E. Wacker Drive, Chicago 1, Ill.

— s b d —

DRACKET APPOINTMENT

A. E. SCHNEIDER

A. C. Shattuck, Jr., president of the Drackett Products Co., has announced the appointment of A. E. Schneider as assistant to R. B. Alspaugh, vice president in charge of the soybean division.

Schneider was formerly with Cargill, Inc., first at St. Louis and recently as manager of the barley department at Minneapolis.

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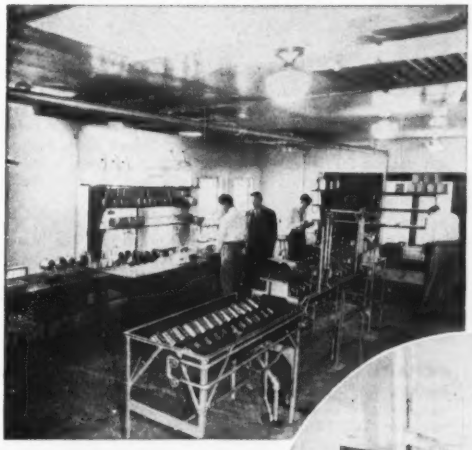
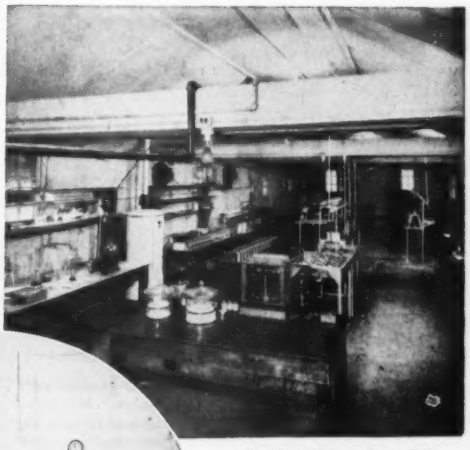


The Chicago, Ill., laboratory is equipped with the most modern equipment for refining soybean oils.



The Des Moines, Iowa, laboratory with all the latest equipment for refining oils.

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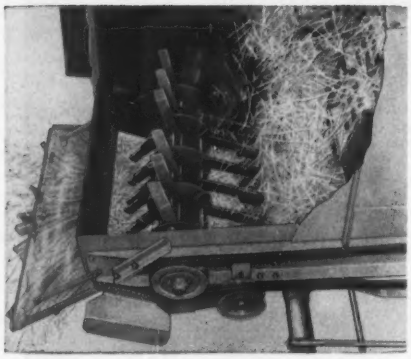


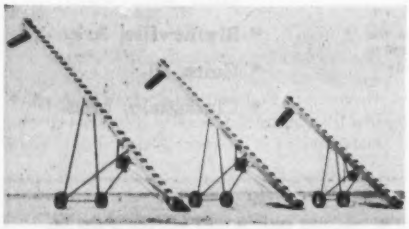
CHOPPER. This new hammermill-type straw chopper available for John Deere No. 55 and No. 65 combines, chops heavy straw, bean stalks and weeds into short, easy-to-turn-under lengths, and distributes the material in a thin, even layer over the full width of the combine swath. Then the chopped straw and weeds add humus and plant food to the soil, without hindering plowing and seedbed preparation or having to be burned.

The chopper is driven by V-belt and steel roller chain from the beater shaft of the combine.

For further information, write Soybean Digest 6c, Hudson, Iowa.

FINANCE PLAN. Parke Burrows, president of Burrows Equipment Co., recently announced a new customer finance plan. The program is designed for customers purchasing equipment with the valuation of $1,000 or more. Favorable terms at nominal interest rates can be arranged with up to 24 months to pay.

For full details write Burrows Equipment Co., 1316-D Sherman Ave., Evanston, Ill.



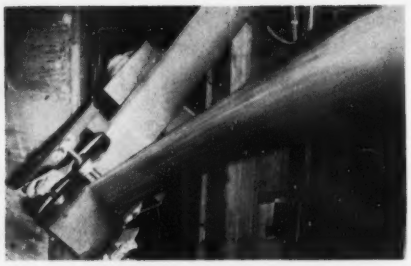
ELEVATOR. A new, low-priced chain elevator that will move up to 100 bushels of grain per minute and load any material from pea size to baled hay is announced by Mayrath, Inc., manufacturer of the Mayrath auger loader.

The new chain elevator is available in three sizes, 24 feet, 32 feet and 40 feet. It loads at angles up to 45 degrees and lifts as high as 28 feet. All three models are shown above.

For further information write Soybean Digest 6d, Hudson, Iowa.

FOOTS PRESS. The new design of the Enterprise Foots Press PF-7W is a very compact unit mounted on a support frame that includes the motor drive mount. It is featured by easy access to the internal screw for cleaning.

For operating information on this unit write Soybean Digest 6g, Hudson, Iowa.



SWIVELOADER. This centrifugal thrower unit is designed to load box cars over the top of three 20-inch grain doors. The operator can load and trim the car without entering it, since the thrower unit pivots on the end of the feed chute to reach all corners of the car.

The S-Z "Hi-Type" Swiveloader can handle all types of granular and small lump bulk material under to two-inch size. Materials are easily thrown to box car corners at rates up to 80 tons per hour.

For further information write Soybean Digest 6f, Hudson, Iowa, and ask for bulletin 253.

SEPARATION EQUIPMENT. Bulletin 0-4 of the Bauer Brothers Co. illustrates and describes hulling and separation equipment for oilbearing seeds and nuts. Machines featured are disc and knife hullers, pneumatic-mechanical separators, and rotary-type cylinder beaters.

The manufacturer offers engineering and laboratory service to solve specific problems.

For a copy of the bulletin write Soybean Digest 6i, Hudson, Iowa.

COMBINE. The new 25 combine with six- or seven-foot cut is announced by John Deere as successor to the No. 12-A. This new and adaptable combine is a specialist at harvesting and saving more grain and seed.

Full-width, straight-through handling of the grain and straw; new quick-change cylinder speed control that makes it easy to get exactly the proper speed for any crop; new open-bar grate with snap-in inserts that insures clean threshing in any crop; new windrow spreader that distributes windrowed crops evenly over the full width of the platform; new all-steel straw rack; and other improvements make the new John Deere 25 an outstanding diversified crop combine.

For further information write Soybean Digest 6b, Hudson, Iowa.

GRINDERS. A new four-page folder describing and illustrating Gruendler Crusher & Pulverizer Co. hammermills, grinders and batch and continuous mixers for the soybean processing, formula feed and soybean glue industries has been issued by this firm.

A number of installations in various plants are illustrated.

For a copy write Soybean Digest 6a, Hudson, Iowa.

ALL THE FINEST

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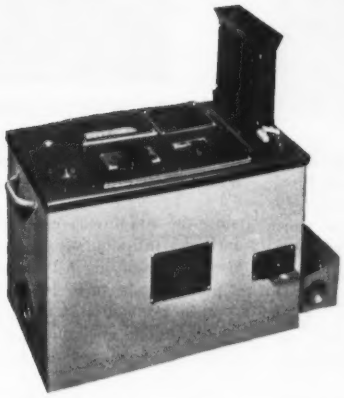
EQUIPMENT FOR GRAINS, FEEDS AND SEEDS



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Moves – bags or boxes horizontally around your plant, between floors	**Stacks** – by resting on top tier
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WASHINGTON DIGEST

By WAYNE DARROW
Washington Correspondent for
The Soybean Digest

1954 OUTLOOK. Effectiveness of the 1953-crop cottonseed price support program will have a lot to do with soybean prices next fall and winter, fats and oils experts here believe.

If the cottonseed support is effective at a fairly high level, the direct effect on soybeans will be small. If the support is lower, or less effective, they figure bean price may drop to around loan level of 90 percent of parity.

Pressure from Southern states is pretty sure to force continuation of a cottonseed support program, even though it's been recommended that this program be dropped in the coming season.

A return to the type of program under which producers are offered direct cottonseed loans, instead of having products supported at a fixed level as last year, has been widely discussed.

The following brief exchange between Howard Gordon, PMA administrator, and Congressman Hunter of California at the USDA appropriation hearings gives you an idea of top official thinking on cottonseed support and its relation to soybean support:

Hunter: "I have been advised by people in the cotton industry in California that if the government supports cottonseed and soybeans at 90 percent of parity, the price of soybean oil is less than the price of cottonseed oil, with the result that the latter is priced out of the market; that in order to keep the two in balance so far as price is concerned cottonseed should be supported at about 75 percent in comparison with 90 percent of parity for soybeans. Is that about right?"

Gordon: "There is no question that a 90 percent support on cottonseed will act as an umbrella over soybean oil, and it has the result of soybean oil getting a larger portion of the market than it otherwise would be able to get.

"It is estimated that if there were no support on cottonseed and there were a support of 90 percent on soybeans, which has already been proclaimed for this year, you would get 75 to 80 percent on cottonseed, with the result that soybeans are holding an umbrella on cottonseed. It is thought there would be a levelling off to some extent as between the two."

The large take-over of cottonseed oil, meal and linters under last season's program soured USDA on the "package" type of cottonseed support. From the 1952 cottonseed crop, CCC has been tendered 874 million pounds of cottonseed oil, 2,389,000 short tons of meal, and 502 million pounds of linters.

Counting carryover of cottonseed oil from the 1951 crop, CCC still has 993 million pounds, representing 75 percent of total edible oil stocks Apr. 1. About half of the meal has been sold.

BAE estimates production of edible oils will be greater from April through September than a year ago because of larger soybean crushings. It expects a reversal of the recent downtrend in edible oil prices a little later this season as commercial supplies tighten and CCC stocks are dipped into.

OILS USAGE. Disappearance of fats and oils into civilian channels last year increased one pound per person over the year before, BAE reports. Non-food use in 1952 totalled 21.6 pounds a person, 1½ pounds less than in 1951. Food use totalled 43.9 pounds a person (fat content), up 2.3 pounds from the previous year.

Consumption of margarine, shortening and other edible oils—mainly cooking and salad oils, salad dressings and mayonnaise—was at a peak. Butter use dropped to a new low. The per capita figures by groups: Margarine 7.8 pounds a person compared with 6.5 pounds in 1951; shortening 10.1 pounds compared with 8.9; other edible oils 8.8 pounds compared with 7.7; lard 11.7 compared with 12 in 1951; butter 8.7 compared with 9.5 in 1951.

There has been an uptrend in domestic use of fats and oils since 1932, BAE says, but the gain in production has been greater. This accounts in large part for the shift in U.S. trade position from a net importing to a net exporting country.

Most of the gain in consumption since the mid-thirties has been due to increase in population. Per capita use of fats and oils in 1952 was about a pound less than in 1935-39. However, the population has grown 22 percent, bringing an increase of 18 percent in total consumption of fats and oils.

BUTTER. The Army has formally agreed to purchase some of Commodity Credit's stocks of butter. CCC has offered up to 50 million pounds. Army so far has purchased a million pounds at 15 cents a pound.

The Army has been dividing its purchases between butter and margarine, using approximately 34 million pounds of margarine last year, according to testimony at House appropriations hearings.

Howard Gordon, head of PMA, explained the USDA butter offer to the Army at the hearings in April. Gordon said:

"We are offering them up to 50 million pounds of butter at a price competitive with margarine, and we are going to push that as hard as we can. The butter industry asked us to throw the total requirements on a competitive basis.

"We felt we would be interfering with normal trade if we did that, and we insisted that the Army continue their normal purchase of butter, and then make additional purchases on as competitive a basis as we could possibly sell to them to replace margarine. We feel that is the soundest basis to follow." (See comment on page 6.)

FEEDSTUFFS. Total consumption of commercial feedstuffs in

the first half of the 1952-53 season was 520,000 tons, nearly 6 percent smaller than in the same period a year ago, reversing a three-year trend.

Consumption of oilseed meals for the period declined 282,000 tons. The decline in feed use is due both to smaller numbers of livestock to be fed, and to less fed per grain consuming animal unit—an estimated 105.3 pounds per unit the first half of the season compared with 108.6 pounds last season and 105.1 pounds in the first half of 1950-51.

Here is a comparison of feedstuffs consumption for the first half of this season with the same period last year and total 1951-52 use:

Feedstuffs	Oct. 1951 Sept. 1952	Oct.-Mar. 1951-52	Oct.-Mar. 1952-53
	1,000 Tons		
Oilseed Cakes & Meals			
Soybean	5,640.0	3,101.3	2,906.5
Cottonseed	2,645.2	1,886.1	1,810.4
Linseed	519.6	277.3	278.1
Peanut	97.4	50.4	21.9
Copra	220.4	97.7	113.2
Total Oilseed Meals	9,122.6	5,412.8	5,130.1
Grain Byproduct Feeds			
Wheat Millfeeds	4,973.8	2,522.7	2,415.7
Gluten Feed & Meal	897.1	447.9	473.0
Distillers' Dried Grains	338.7	232.0	84.7
Brewers' Dried Grains	223.4	102.9	101.1
Rice Millfeeds	243.3	142.1	170.4
Total Grain Byproduct Feeds	6,676.3	3,447.6	3,244.9
Other Feeds			
Fish Meal	374.2	142.6	91.8
Alfalfa Meal	1,177.9	450.9	466.4
Total All Feedstuffs	17,351.0	9,453.9	8,933.2

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SELLS INTEREST

Clive F. Marshall, president of Honeymead Products Co., Mankato, Minn., has sold his interest in that firm to Osborne Andreas. He will remain with the company for several months, but says he has made no plans beyond that.

Marshall left Allied Mills, Inc., Chicago, to be price executive in the cereals, feeds and agricultural chemicals branch of the Office of Price Administration in Washington in 1944 and 1945.

He joined Honeymead Products Co. in 1947.

CLIVE F. MARSHALL

— s b d —

CHARGE WHEAT BRIBE

Stephen B. Sarrapede, chief of the U. S. Department of Agriculture's investigation section, testified in Washington, D. C., May 13 that C. J. Winters, former superintendent of the Louisiana Dock Board's grain elevator at New Orleans, received payments totaling $36,000 for alleged mingling in 1951 of Canadian wheat with the better stocks of wheat stored at New Orleans, as reported by the New Orleans Times-Picayune.

Sarrapede said the payments were made by the Transit Grain Co. of Fort Worth, Tex.

E. H. Lockenberg, general manager of the Dock Board, said the board accepted Winters' resignation Apr. 20 after he admitted accepting $33,000 from the Texas grain firm.

The case is now in the hands of the justice department for either civil or criminal prosecution.

Breaking of the wheat blending case has renewed speculation as to whether the same thing may not have happened in the past to soybeans shipped through the port of New Orleans. Exporters in the past have complained repeatedly that soybeans received in European ports had far more foreign matter than that called for by inspection certificates.

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FOR SALE: 15 ANDERSON EXPELLERS; 11 Duo's, 4 Super Duo's; 10 Shriver and Sperry Filter Presses 42 inches x 42 inches to 12 inches x 12 inches; 3 Louisville Steam Tube Dryers; 6 Ro-Ball and Rotex Screens. Consolidated Products Co., Inc., 16 Park Row, New York 38, N. Y.

FOR SALE—COMPLETE EQUIPMENT for 3500 bushel per day expeller soybean plant located in southern Iowa. Includes 5 Anderson Duo Expellers, 4 Anderson 120 bushel size rotary steam driers, Divine Foots Separator, 24" Sperry Recessed Plate Filter, 10 x 36 Roller Mill, Pumps, Conveyors, Hammer Mill, Bucket Elevators and other related equipment. All equipment in first-class operating condition. Write P. O. Box 490, Clinton, Iowa.

FOR SALE — ONE 40 FOOT x 16 INCH Electric driven portable belt elevator, belt carried on 32 ballbearing rollers. Tamms Grain Co., Tamms, Ill.

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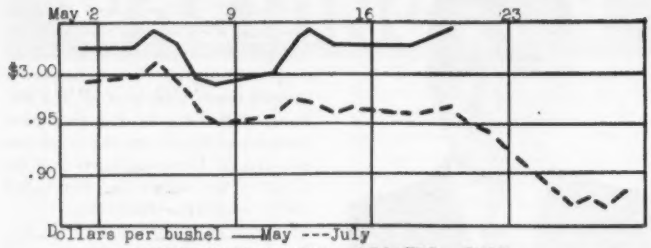
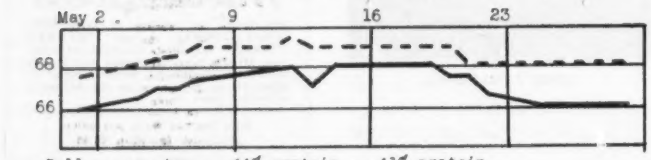


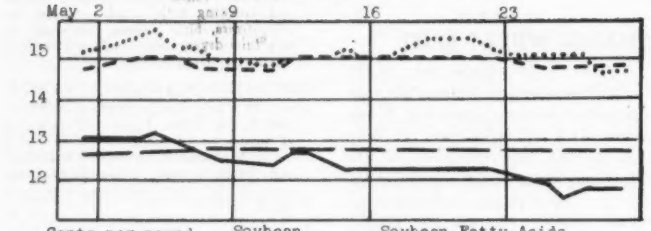
Dollars per bushel —May ---July

SOYBEAN OIL MEAL, DECATUR, BULK



Dollars per ton —44% protein ---41% protein

CRUDE VEGETABLE OILS, TANKCARS



Cents per pound ___Soybean ___ ___Soybean Fatty Acids
---Cottonseed ....Coconut

May Markets Unsettled

MAY MARKETS for soybeans and soy products were generally unsettled, reflecting the condition of commodity markets generally.

Soybeans and meal weakened the last week in May after showing some strength earlier. Oil continued a weaker trend begun in early April and reached the lowest levels in 1953.

Weakening factors included the uncertainty over peace prospects, the government's announcement that it will abandon the cottonseed price support program as it now stands (see discussion on page 32), and continued poor processor demand for soybeans.

Processors were said to have fairly large supplies of beans on hand due to the unsatisfactory demand, and there were predictions that there will be a sizable carry-over of soybeans into the next season. If this should happen it will be the first time in the history of the crop. But processors were reluctant to follow the market for meal downward, and there was talk that some might shut down the last of May.

Although offerings of soybeans were generally scarce during the month, there were liberal offerings on a slight rise in the market at the end of May. Mixed feed demand was some better early in the month and there was continued export demand.

OIL. Refiner demand for soybean oil was only spotty. Buyers were uneasy because of large stocks of finished products on hand and continued slow consumer demand. Soybean oil went off for six successive weeks.

MARKETS

EXPORTS. April soybean exports totaled 1.7 million bushels bringing the total since Oct. 1 to 22.7 million compared with 13 million the same period last year, according to Production and Marketing Administration.

MEAL IMPORTS. Imports of oilseed cakes and meals during March totaled 29,353 tons compared with 18,671 in February and 25,852 in March 1952, according to PMA. Of the March imports 12,516 tons were cottonseed meal and 5,747 tons were soybean oil meal. Bulk of the imports were from Mexico, Argentina, Peru, Turkey, Canada (soybean oil meal), and the Philippines (copra meal).

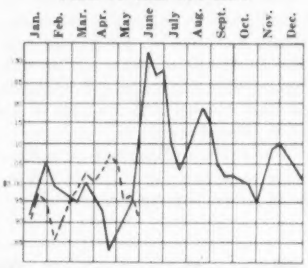
Exports of oilseed meals during March totaled 1,499 tons, the bulk of which was soybean oil meal.

Oilseed Cakes and Meals: Imports and Exports, Oct. through March 1952 and 1953

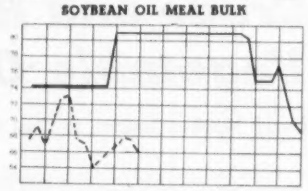
Oilseed Cake & Meal	—Imports— 1951-52	1952-53	—Exports— 1951-52	1952-53
Soybean	6,494	35,173	34,381	10,507
Cottonseed	84,649	101,570	34,699	126
Linseed	379	20,001	5,868	10
Peanut	891	3,427	2,168	0
Copra	37,023	51,043	—	—
Other	4,854	36,445	3	0
TOTAL	134,290	247,659	77,119	10,643

TRENDS AT A GLANCE

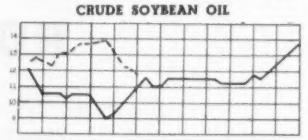
NEAR FUTURES SOYBEANS



SOYBEAN OIL MEAL BULK



CRUDE SOYBEAN OIL



— 1952 - - - 1953

IN THE MARKETS

● **FACTORY USE VEGETABLE OILS** for February and March, as reported by Bureau of the Census.

PRIMARY MATERIALS: FACTORY PRODUCTION AND CONSUMPTION, AND FACTORY AND WAREHOUSE STOCKS, MARCH 1953-FEBRUARY 1953 (1,000 pounds)

	Factory production		Factory consumption		Factory and warehouse stocks	
	March 1953	Feb. 1953	March 1953	Feb. 1953	Mar. 31, 1953	Feb. 28, 1953
Cottonseed, crude	165,269	*180,541	183,043	*187,305	147,853	*170,739
Cottonseed, refined	170,577	*173,738	90,754	*99,752	812,596	*723,763
Peanut, crude	5,031	3,653	5,058	4,309	1,348	1,587
Peanut, refined	4,648	3,975	3,047	2,731	3,221	3,248
Corn, crude	24,130	20,465	22,885	21,608	15,147	15,488
Corn, refined	21,291	20,060	20,241	19,199	4,615	5,281
Soybean, crude	221,783	*200,412	216,608	200,561	158,194	*156,308
Soybean, refined	201,036	186,396	188,963	*175,466	97,391	*88,275
Coconut, crude	36,332	24,232	44,820	45,998	36,744	30,782
Coconut, refined	29,922	29,174	27,093	*25,409	7,429	7,677
Linseed, raw	39,027	41,300	43,085	41,599	636,113	641,675
Linseed, refined	18,292	17,788	21,817	19,687	35,783	37,085
Vegetable foots (100% basis)	23,929	*22,106	20,561	*16,161	56,340	*54,841

* Revised.

FACTORY CONSUMPTION OF VEGETABLE OILS, BY USES, DURING MARCH (1,000 pounds)

	Edible products			Inedible products				
	Shortening	Margarine	Other edible	Soap	Chemicals	Paint and varnish	Lubricants and greases	Other inedible products
Cottonseed, refined	13,637	4,225	1,416		162	15		78
Soybean, crude				123		379	26	1,458
Soybean, refined	41,162	5,614	9,930	14		6,808	21	8,604
Vegetable foots				3,321		96		1,039
Hydrogenated cottonseed oil, edible	11,974	18,884	1,677					4
Hydrogenated soybean oil, edible	31,682	59,077	930					6
Fatty acid stock				664		61	35	200
Stearic acid (40-50% stearic content)				299	383	8	98	2,764

● **STOCKS.** Production and Marketing Administration's commercial grain stock report. (1,000 bu.)

	May 4	May 11	May 18	May 25
U. S. Soybeans in Store and Afloat at Domestic Markets				
Atlantic Coast	572	579	578	702
Gulf Coast	1,082	1,500	521	927
Northwestern and Upper Lake	125	127	126	125
Lower Lake	1,664	1,437	1,271	1,224
East Central	872	883	861	720
West Central Southwestern & Western	2,805	2,632	2,476	2,243
Total current week	7,120	7,158	5,833	5,941
Total year ago	3,636	3,224	3,962	2,535
U. S. Soybeans in Store and Afloat at Canadian Markets				
Total current week	201	201	201	201
Total year ago	0	0	0	0
Total North American Commercial Soybean Stocks				
Current week	7,321	7,359	6,034	6,142
Year ago	3,636	3,224	3,962	2,535

STOCKS OF SOYBEANS, APR. 1, 1953, BY STATES**

State	Off-farm		Total All Positions	
	Apr. 1, 1952	Apr. 1, 1953	Apr. 1, 1952	Apr. 1, 1953
	Thousand bushels			
Ohio	9,758	9,658	15,524	15,862
Ind.	4,212	4,067	13,041	12,920
Ill.	22,172	31,140	39,297	44,760
Minn.	3,335	5,239	7,859	10,945
Iowa	11,389	12,658	23,721	25,813
Mo.	5,517	4,999	9,387	9,297
Kans.	1,373	2,390	2,245	3,420
N. C.	*	1,162	*	1,832
Ky.	1,225	1,712	1,645	1,924
Ark.	2,063	3,373	2,791	4,066
All other	8,979	11,157	14,608	15,072
U. S.	70,023	87,555	130,118	145,871

* Included in "all other" to avoid disclosing individual operations.
** Reported by U. S. Department of Agriculture crop reporting board.

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UNITED STATES STOCKS OF SOYBEANS BY POSITIONS**

Position	Apr. 1 1951	Apr. 1 1952	Jan. 1 1953	Apr. 1 1953
	Thousand bushels			
On farms 1/	48,085	60,095	81,731	58,316
Terminals 2/	12,513	5,457	13,394	9,048
Commodity Credit Corp. 3/	....	....	1,037	815
Processing plants 4/	63,137	42,708	79,852	49,613
Int. mills, elev. & whses. 1/ 5/	19,594	21,858	48,369	28,079
Total	143,329	130,118	224,383	145,871

1/ Estimates of the Crop Reporting Board. 2/ Commercial stocks reported by the Grain Branch, PMA, at 44 terminal markets. 3/ Owned by CCC in transit to ports. 4/ Bureau of the Census. 5/ All off-farm storages not otherwise designated for each grain.

● **EXPORTS.** The U. S. exports of soybeans and soybean oil for October through March, as reported by the Foreign Agricultural Service of the U. S. Department of Agriculture.

Marketing year and month	Soybeans	Soybean oil: Crude	Refined: Not Further Processed	Refined: Deodorized & Hydrogenated	Total bean equivalent
	Bushels	Pounds			Bushels
1952-53					
October	2,745,346	11,462,246	1,212,000	31,514	4,020,833
November	5,820,794	21,305,353	1,295,844	225,309	8,107,997
December	5,023,815	13,553,212	2,112,387	1,180,761	6,724,808
Sub-total (3 months)	13,589,955	46,320,811	4,620,231	1,437,584	18,853,638
January	3,511,224	1,499,270	1,077,464	96,718	3,785,066
February	2,236,775	583,838	466,119	382,049	2,384,768
March	1,659,489	3,187,305	1,273,306	407,112	2,153,356
Total (6 months)	20,997,443	51,571,224	7,437,120	2,323,463	27,176,828

Does not include shipments to U.S. Territories.

● **SUPPLY AND DISTRIBUTION** of the 1951 and 1952 soybean crops, reported by Production and Marketing Administration.

	1951-52	1952-53
	All in 1,000 bushels	
Carry-over 1/	4,159	3,575
Production	282,477	291,682
Total supply 2/	286,636	295,257
Farm use including seed for season	22,097	22,000
Quantity remaining for processing, export, or carry-over	264,539	273,257
Disappearance through Mar. 31 3/		
Crushed for oil or processed 4/	135,894	126,567
Exported	11,537	20,338
Total	147,431	146,905
Balance on Apr. 1 for processing, export, or carry-over	117,108	126,352

1/ Soybean stocks as of Oct. 1. 2/ Imports negligible. 3/ Soybeans, October through March. 4/ New crop soybeans crushed prior to Oct. 1 not included. It is believed that 4 to 6 million bushels of the 1952 crop were processed prior to Oct. 1 while only 2 to 3 million bushels of the 1951 crop were processed prior to Oct. 1.

● **PRICES.** Average price for soybeans received by farmers, effective parity price and price support rates (dollars per bushel).

Average Farm Price: Apr. 15 1952	Mar. 15 1953	Apr. 15 1953	Effective parity: Apr. 15 1953	National Average Price Support Rate: 1952 crop	1953 crop
2.72	2.81	2.81	2.78	2.56	2.56

Average farm and parity prices from Crop Reporting Board.

● **SHORTENING.** Standard shortening shipments reported by the Institute of Shortening and Edible Oils, Inc., in pounds:

Apr. 26	3,027,904
May 2	3,170,637
May 9	2,746,164
May 16	2,973,547

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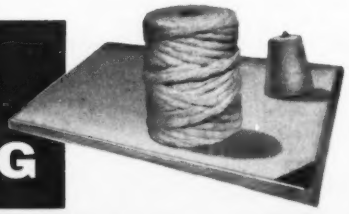

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USED BURLAP BAGS
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● **PROCESSOR OPERATIONS.** Reported by Bureau of the Census for March and April.

Primary Products Except Crude Oil, at Crude Oil Mill Locations: Production, Shipments and Transfers and Stocks, April 1953-March 1953

Products	Unit of measure	—Production— April 1953	March 1953	Shipments and —transfers— April 1953	March 1953	End of month —stocks— Apr. 30 1953	Mar. 31 1953
Soybean:							
Cake & meal	tons	455,380	485,562	441,782	470,738	167,821	154,223
Lecithin	1,000 lbs.	1,949	1,991	2,252	1,812	2,576	2,879
Edible soy flour, full fat	tons	345	400	441	394	168	264
Edible soy flour, other	tons	3,919	5,060	4,177	5,063	903	1,161
Industrial soy flour	tons	1,552	2,657	(1)	2,838	525	(1)

(1) Not shown to avoid disclosure of figures for individual companies.

Soybeans: Receipts, Crushings and Stocks at Oil Mills, by States, April 1953 - March 1953

(Tons of 2,000 pounds)

State	Receipts at mills April 1953	March 1953	Crushed or used April 1953	March 1953	Stocks at mills Apr. 30 1953	Mar. 31 1953
U. S.	427,159	426,984	575,136	613,117	1,340,410	1,488,387
Arkansas	(1)	(1)	8,841	12,307	69,001	91,924
Illinois	176,387	179,785	233,299	246,377	537,653	594,566
Indiana	74,602	27,007	66,602	72,658	80,676	72,676
Iowa	89,033	110,993	89,112	101,587	177,787	177,866
Kansas	(2)	14,033	11,311	12,110	(2)	10,270
Kentucky	(2)	10,609	15,475	13,378	(2)	49,234
Minnesota	30,180	24,764	28,696	27,413	32,363	30,879
Mississippi	(2)	(2)	5,929	(2)	26,788	37,193
Missouri	(1)	(1)	11,236	11,114	(2)	43,872
Nebraska	(2)	(2)	5,003	5,318	(2)	18,225
North Carolina	(2)	133	(2)	5,498	28,664	33,831
Ohio	43,190	61,217	58,204	66,677	184,020	199,034
Oklahoma	(2)	(2)	(2)	2,937	(2)	(2)
Texas	(2)	(2)	(2)	(2)	(2)	
All other	32,325	6,547	41,428	35,743	203,458	128,818

(1) Receipts exceeded by reshipments of beans previously received and held in the State. U. S. receipts are on net basis, excluding transfers between mills. (2) Included in "All other" to avoid disclosure of figures for individual companies.

Soybean Products: Production and Stocks at Oil Mill Locations, by States, April 1953-March 1953

State	Crude oil (thousand pounds) —Production— April 1953	March 1953	—Stocks— Apr. 30, 1953	Mar. 31, 1953	Cake and meal (tons) —Production— April 1953	March 1953	—Stocks— Apr. 30, 1953	Mar. 31, 1953
U. S.	208,325	221,783	53,046	48,618	455,380	485,562	167,821	154,223
Arkansas	2,919	3,965	577	1,229	7,058	9,873	7,692	7,452
Illinois	87,994	91,650	22,603	16,786	179,685	188,434	65,704	56,977
Indiana	24,376	26,608	5,966	5,900	53,174	58,494	(1)	(1)
Iowa	31,179	36,923	7,607	7,372	72,387	83,948	18,351	17,744
Kansas	3,995	4,387	430	498	9,562	10,216	(1)	(1)
Kentucky	5,843	5,005	763	533	12,239	10,578	456	649
Minnesota	9,774	9,173	3,059	3,891	23,073	21,951	4,082	(1)
Mississippi	2,496	(1)	(1)	967	4,908	(1)	3,171	2,892
Missouri	4,007	4,073	822	891	9,121	8,914	461	738
Nebraska	1,544	1,690	237	359	4,250	4,522	(1)	(1)
N. Carolina	(1)	1,511	567	826	(1)	4,419	8,851	6,880
Ohio	21,077	23,980	4,654	5,960	46,315	52,836	3,368	5,307
Oklahoma	(1)	761	(1)	(1)	(1)	2,477	4,862	5,777
Texas	(1)	(1)	(1)	—	(1)	(1)	(1)	(1)
All other	13,121	12,057	5,761	3,406	33,608	28,900	50,823	49,807

(1) Included in "All other" to avoid disclosure of figures for individual companies.

● **PLYWOOD GLUE.** Consumption and stocks of glue by the softwood plywood industry, as reported by Bureau of the Census. (Dry basis, 1,000 pounds.)

	Consumption March 1953	February 1953*	Stocks March 1953	February 1953*
TOTAL	10,736	9,382	6,039	5,534
Soybean	6,303	5,573	2,929	2,792
Urea resins	586	527	465	714
Phenolic resins	2,865	2,315	2,004	1,605
Other	982	957	641	423

*Revised.

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● **FUTURES TRADING** and open contracts in soybean oil meal in Memphis Merchants Exchange Clearing Association, in tons bulk.

	Volume of Trading	Open Contracts
Apr. 28	6,200	75,000
Apr. 29	6,800	75,300
Apr. 30	6,400	75,300
May 1	3,800	75,500
May 4	900	75,400
May 5	2,600	75,200
May 6	8,200	79,400
May 7	6,600	83,600
May 8	2,300	83,500
May 11	3,900	84,400
May 12	5,200	83,200
May 13	3,400	83,700
May 14	2,800	83,200
May 15	1,600	82,600
May 18	3,700	82,400
May 19	2,400	81,800
May 20	5,300	82,900
May 21	3,300	84,600
May 22	5,000	86,900
May 25	3,500	86,900
Total for 20 days reported		83,900

All open contracts in soy concentrate were liquidated May 14, and trading was discontinued on the Memphis Exchange.

● **INSPECTIONS.** Soybeans, inspected receipts, by grades and percent, as reported by Production and Marketing Administration.

Soybeans: Inspected receipts, by grades, and percent (1)

Grade	Oct.-April —1951-52—		Oct.-April —1952-53—		April —1952—		March —1953—		April(2) —1953—	
	1,000 bushels	%	1,000 bushels	%	1,000 bushels	%	1,000 bushels	%	1,000 bushels	%
No. 1	34,022	23	26,960	17	1,977	30	2,537	16	2,343	18
No. 2	64,927	43	73,218	45	2,993	45	7,985	52	6,691	52
No. 3	32,477	22	28,240	18	978	15	2,290	15	1,872	14
No. 4	12,037	8	21,126	13	381	5	1,783	12	1,413	11
Sample	5,863	4	11,215	7	322	5	836	5	646	5
Total	149,326	100	160,759	100	6,651	100	15,431	100	12,965	100

(1) Carlot receipts have been converted to bushels on the basis that 1 carlot equals 1,650 bushels. (2) Of the April 1953 receipts, 10,935 bushels were Black, 750 Mixed, and the remainder Yellow soybeans. Inspections of soybeans in April included 873,940 bushels as cargo lots, 143,204 bushels as truck receipts, and the balance as carlot receipts. Based on reports of inspections by licensed grain inspectors at all markets.

● **MARGARINE PRODUCTION.** Reported by Bureau of the Census from reports of all known manufacturers producing margarine.

PRODUCTION OF MARGARINE: CUMULATIVE MONTHLY AND ANNUAL TOTALS (Thousands of pounds)

	Total	Uncolored	Colored
1953—4 months (Jan.-April)	*447,397	25,947	*421,450
1952—4 months (Jan.-April)	*445,161	*57,990	*387,171
1952 annual production	*1,285,975	*129,726	*1,156,249
1951 annual production	*1,040,718	*211,662	*829,056
1950 annual production	937,045	437,402	499,643

*Revised. Data through June 1950 are from Bureau of Internal Revenue.

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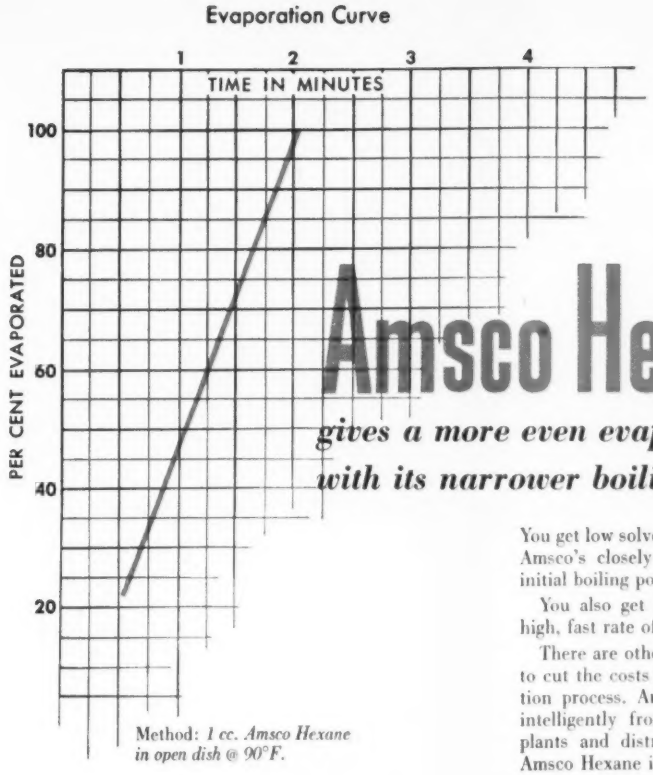

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Pounds/gallon (60° F)	5.703
A.S.T.M Distillation	
I.B.P.	151° F.
50%	154° F.
90%	154° F.
Dry Point	156° F.
Vapor Pressure @ 100° F, psia	5.0
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